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Erindale Campus

University of
Toronto
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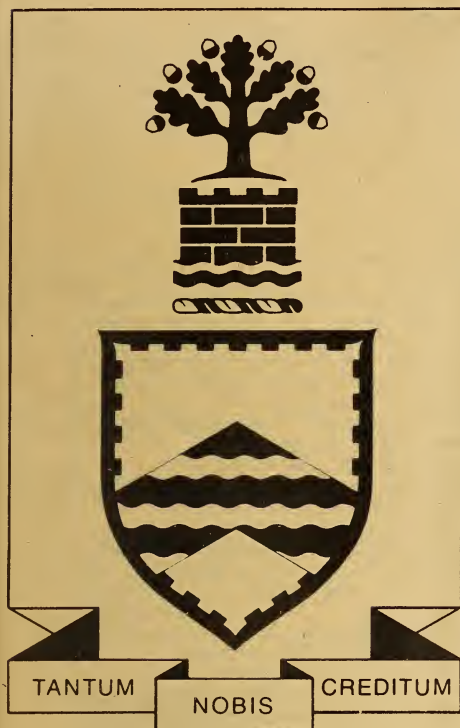
REFERENCE
DEPARTMENT

Calendar 1988/89



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Erindale College is located thirty-two kilometres west of downtown Toronto on Mississauga Road, in the City of Mississauga.

Anyone wishing information about the College may write to: The Registrar, Erindale College, University of Toronto, Mississauga Road, Mississauga, Ontario, L5L 1C6.

The telephone number for information is 416-828-5399.

Erindale College Council

The Erindale College Council develops academic policy, awards scholarships, bursaries, prizes and other awards in the gift of the College and advises the Principal on all matters concerning the conduct of College affairs. It is composed of the chief academic administrators of the College, all members of the teaching staff, 60 full-time under-graduates, 15 part-time undergraduates, 5 graduate students, the Heads of administrative departments, 5 members of the administrative staff, 2 members of the Erindale alumni and 2 members of the Associates of Erindale.

The Council appoints four standing committees: the Executive Committee, Academic Affairs Committee, College Affairs Committee and Resource, Planning and Priorities Committee. Each of these may appoint such sub-committees as are deemed necessary to carry on the policy and decision making of the College. Like the Council itself, the composition of all committees reflects the various interests and concerns of all College members.

Erindale College, one of the eight Colleges that constitute the Faculty of Arts and Science in the University of Toronto, opened in September 1967, as a suburban campus of the University. The College offers the Arts and Science Programme and students may qualify for the University of Toronto Bachelor of Arts, Bachelor of Science or Bachelor of Commerce degree. The admission regulations are those of the University of Toronto.

On January 8, 1975, the College of Arms granted to Erindale College its coat of arms. Green and gold, the colours of Erindale, predominate in the coat of arms representing the natural beauty of the campus. The oak tree comes from the University of Toronto coat of arms with its motto, *Velut arbor aevum*, "May the tree thrive". The wavy blue and silver bars in the chevron signify the location of the College at a major bend in the Credit River and the motto, *Tantum Nobis Creditum*, "So much has been entrusted to us" is a word play on the name of the river.

1. The Council of the Faculty of Arts and Science reserves the right to change the content of, or to withdraw, any course. In such cases every effort will be made to provide equivalent alternative instruction, but this cannot be guaranteed.
2. The Faculty also reserves the right to limit the number of students in a course or any section of a course if the number of qualified applicants exceeds the resources available. Notwithstanding this, every effort will be made to accommodate students, particularly in 100 series courses, although it is understood that some limitation on the availability of certain sections will have to be made.
3. The University reserves the right to alter the fees and other charges described in the Calendar.
4. This Calendar provides information for Erindale College only. Separate calendars are published by the University of Toronto for the St. George campus and Scarborough College.
5. The words "man" and "he" are used in the generic sense throughout this Calendar.
6. ACADEMIC OFFENCES ARE A SERIOUS MATTER. See page (39).
7. The University holds the student responsible for knowing the rules and regulations printed in the Calendar.
8. Receipt of registration material or any college publication, submission of a registration form or payment of fees does not necessarily constitute eligibility to register in the coming session. Students who are suspended as a result of the May or August examinations will be so informed on the Statement of Results and will not be permitted to register. Any fees paid toward the session will be refunded in full.

The Calendar

The Erindale Calendar serves as a counselling guide and statement of the most important rules and regulations for students seeking to obtain the degrees of Bachelor of Arts, Bachelor of Science or Bachelor of Commerce from the University of Toronto through Erindale College.

Each department offering courses at Erindale has included a list of its academic staff, an introductory essay, and details of the programmes which it sponsors. When selecting courses, the student should read these essays, as well as the description of courses offered, and seek advice from the College Registrar and from Departmental academic counsellors. Particular attention should be paid to exclusions, prerequisites and corequisites. Students who wish to have such requirements waived, or who have equivalent qualifications, must consult the department offering the course.

All students should refer to the list of Sessional Dates so as to avoid incurring academic or financial penalties and are urged to read the sections entitled Academic Status and Degree Requirements as these state concisely what is required in order to qualify for the degree.

Calendar Supplements

Two supplements to the Calendar are issued: one in June and the other in September in time for the Winter Session registration week. They contain specific instructions for registration and enrolment, and detailed timetable and scheduling information for the winter session. The information they contain is just as important as that in this Calendar.

Schedule of Fees

This publication which contains information on academic and incidental fees, payment procedures and refunds, is sent to each student before registration.

Summer Session Information

The list of course offerings for Summer Session is available in February.

The Erindale College Awards Bulletin

Provides information on Government financial assistance, scholarships, medals, prizes and bursaries. A copy may be obtained from the Awards and Financial Aid Office, Room 3095, South Building, and the Registrar's Office, Room 2122, South Building.

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Calendar

1988

January

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Calendar

1989

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Sessional Dates 1988 - 1989

1988		July 1	Canada Day - University closed.
March 15	Last date for new students to apply for admission in order to take A, F, H, and Y courses in Summer Session (first term).	July 4	Second term begins. Classes begin in B and S courses.
April 1	Good Friday: - University closed.	July 8	Last date to enrol in B and S courses.
April 29	Last date for students to request re-registration for Summer Session (first term).	July 22	Last date to withdraw from H and Y courses without academic penalty.
May 13	Last date for registration for A, F, H and Y courses. After this date, a late registration fee will be imposed. Last date for new students to apply for admission in order to enrol in B and S courses in Summer Session.	July 29	Last date to withdraw from B and S courses without academic penalty.
May 16	Summer Session classes begin in A, F, H and Y courses.	August 1	Civic Holiday - University closed.
May 20	Last date to add A, F, H and Y courses.	August 12	Classes end in B, H, S and Y courses; all term work must be submitted by this date.
May 23	Victoria Day - University closed.	August 15-19	Final Examinations in B, H, S, and Y courses.
June 1	Last date for new students to apply for admission in order to take A, F, H and Y courses in Winter Session (first term).	August 15	Last date for students to submit a request for re-registration for Winter Session (first term).
June 10	Last date to withdraw from A and F courses without academic penalty.	September 5	Labour Day - University Closed.
June 13	Convocation for Erindale College.	September 6	Statements of Results mailed beginning today.
June 15	Last date for students to request re-registration for Summer Session (second term).	September 6-9	Registration Week.
June 24	Classes end in A and F courses; all term work must be submitted by this date.	September 9	Last date for registration; after this date, a late registration fee will be imposed.
June 27-30	Final examinations may be held in A and F courses.	September 14	Winter Session. classes begin in A, F, H and Y courses.
June 27-July 1	Reading Week - no classes for H and Y courses.	September 23	Last date to add A, F, H and Y courses.
June 30	Last date for registration for B and S courses; after this date a late registration fee will be imposed. Last date to request transfer to St. George Campus for full-time studies.	October 10	Last date to request to graduate at the Fall Convocation.
		November 4	Thanksgiving Day - University closed.
		November 15	Last date to withdraw from A and F courses without academic penalty.
		November 22-23	Last date for new students to apply for admission in order to enrol in B and S courses in Second Term.
		December 1	Fall Convocation. Last date for students in the Study Elsewhere Programme to confirm their programmes.

December 13	First term ends; all term work in A and F courses must be submitted by this date. Last date for students to request re-registration for Winter Session (second term).	June 12	Convocation for Faculty of Arts and Science.
December 14-23	Final examinations in A and F courses. Term tests for multi-section H and Y courses may be held.	June 23	Classes end in A and F courses; all term work must be submitted by this date.
1989		June 30	Last date to request transfer to St. George Campus for full-time studies.
January 2	Second term begins.	June 26-30	Reading week for H and Y courses.
January 13	Last date to add B and S courses.	July 4	Second term classes begin in B and S courses.
February 10	Last date to withdraw from H and Y courses without academic penalty. Last date to apply for the Study Elsewhere Programme. Last date to request to graduate at the Spring Convocation.	August 11	Classes end in B, H, S and Y courses; all term work must be submitted by this date.
February 13-17	Reading Week.	August 14-18	Final examinations in B, H, S and Y courses.
February 24	Last date to withdraw from B and S courses without academic penalty.	September 4	Labour Day: University closed.
March 15	Last date for new students to apply for admission in order to enrol in A, F, H and Y courses in Summer Session.	September 5	Statements of Results mailed beginning today.
March 24	Good Friday - University closed.	Note:	Course suffixes in this section refer to those which appear in the Calendar Supplement.
April 7	Second term ends; all term work in B, H, S and Y courses must be submitted by this date.		
April 10-12	Study period; no tests or examinations may be held in this period.		
April 13-May 5	Final examinations in B, H, S and Y courses.		
May 15	Summer Session classes begin in A, F, H and Y courses.		
June 1	Last date for new students to apply for admission in order to take A, F, H and Y courses in Winter Session (first term).		

University and College Officers

Officers of the University of Toronto - 1987-88

Chancellor

The Hon. J. B. Aird, O.C., Q.C. B.A., LL.D.,
D. Litt.S.

Chairman of the Governing Council

St. Clair Balfour, D.S.C., B.A., LL.D.

President

G.E. Connell, B.A., Ph.D., LL.D., F.R.S.C.,
F.C.I.C.

Vice-President and Provost

J.E. Foley, B.A., Ph.D.

Vice-President, Research

D.M. Nowlan, B.Sc., B.A., M.A., Ph.D.

Vice-President, Business Affairs

A.C. Pathy, Q.C., B.A.Sc.

Vice-President, Institutional Relations

D.R. Cameron, B.A., M.Sc., Ph.D.

Secretary of the Governing Council

J.G. Dimond, B.A., M.A., Ph.D.

**Assistant Vice-President, Planning and
University Registrar**

D. W. Lang, B.A., M.A., Ph.D.

Assistant Vice President, Student Affairs

E.A. McKee, M.A.

University Ombudsman

E. Hoffman, B.A.

Director of International Student Centre

E. Paterson, B.A.

Officers of the Faculty of Art and Science - 1987-88

Dean

R.L. Armstrong, M.A., Ph.D., F.R.S.C.

Vice-Dean

I.M. Drummond, M.A., Ph.D.

Vice-Dean

C.P. Jones, M.A., Ph.D.

Vice-Dean

J. Millgate, M.A., Ph.D.

Vice-Dean

J.J.B. Smith, M.A., Ph.D.

Director of Student Affairs

P.D. Harris, M.A.

Executive Officer

D.L. Myers, B.A.

Faculty Registrar

G.E. Altmeyer, M.A., M.L.S.

Associate Faculty Registrar - Examination and Registration Services

C.A. Belford, B.Th., B.A.

Associate Faculty Registrar - Student Record Systems

J. Gilliland, B.A., M.ED.

Associate Faculty Registrar - Information Systems

K. Heuck, B.Sc.

Associate Faculty Registrar - Petitions and Study Elsewhere

E.M. Ishibashi, B.A.

Officers of Erindale College - 1987-88

Principal

D.P. Morton, B.A., B.A., M.A., Ph.D., F.R.S.C.

Vice-Principal (Academic)

R.L. Beck, B.A., M.A., Ph.D.

Vice-Principal (Administration)

L.J. Brooks, B.Com., M.B.A., F.C.A.

Vice-Principal (Research and Graduate Studies)

W.G. Sprules, B.Sc., M.A., Ph.D.

Associate Dean (Humanities & Part-Time Studies)

R.L. Beck, B.A., M.A., Ph.D.

Associate Dean (Social Sciences)

L.J. Brooks, B.Com., M.B.A., F.C.A.

Associate Dean (Sciences)

W.G. Sprules, B.Sc., M.A., Ph.D.

College Librarian

H.L. Smith, B.A., B.L.S.

Director, Campus Relations

T. Reid, B.Sc.

Registrar

L.T. McCormick, B.A., A.M., Ph.D.

Erindale College Faculty

(As of 1987-88)

*Denotes Discipline Representative/
Associate Chairman

Classics

R.L. Beck, B.A. (Oxford), M.A., Ph.D. (Illinois)
T.G. Elliott, B.A. (Toronto), Ph.D. (Harvard)
C.I. Rubincam*, B.A. (Toronto), B.A. (Oxford), Ph.D. (Harvard)
G.L. Rubinstein, B.I.S. (Waterloo), Ph.D. (Cambridge)

English

J.H. Astington, B.A. (Leeds), M.A. (McMaster), Ph.D. (Toronto)
B. Corman, A.B., A.M., Ph.D. (Chicago)
V.A. DeLuca, B.A. (Hamilton Coll), M.A., Ph.D. (Yale)
J. Dutka*, B.A., M.A. (Alberta), A.R.C.T. (R.C.M., Toronto), Ph.D. (Toronto)
M. Garson, B.A., M.A., Ph.D. (Toronto)
D. Hill, A.B. (Kenyon Coll), M.A., Ph.D. (Columbia)
I. Lancashire, B.A. (Manitoba), M.A., Ph.D. (Toronto)
M.J. Levene, B.A. (Manitoba), M.A., Ph.D. (Toronto)
C. Lock, B.A., D.Phil. (Oxford)
R.R. McLeod, A.B. (Harvard), M.A., Ph.D. (Toronto)
K.I. Michasiw, B.A., M.A., Ph.D. (Toronto)
M. Northey, B.A. (Toronto), M.A., Ph.D. (York)
J. Skvorecky, Ph.D. (Charles)
R. Sullivan, B.A. (McGill), M.A. (Connecticut), Ph.D. (Sussex)
R.W. Van Fossen, A.B., A.M. (Duke), Ph.D. (Harvard)

Fine Art History (Erindale)

L. Eleen*, B.A., M.A., Ph.D. (Toronto)
T. Martone, B.A., M.A. (Boston), M.A., Ph.D. (Inst. of Fine Art, N.Y.U.)
B. Welsh, B.A., M.Phil., (Toronto), Ph.D. (Utrecht)

Fine Art Studio, (Sheridan College)

J. Armstrong, B.F.A. (Mt Allison), M.A. (Chelsea Sch. of Art, London), D.Phil. (Courtauld Inst.)
S. Belanger, B.A. (Montreal), B.F.A. (Concordia), M.F.A. (York)
M. Belisle, B.A., B.Ed. (Ottawa), M.F.A. (Rochester)
E. Brittan, Dip.A.D. (Hornsey College of Art London), A.T.C. (London)
T. Bolliger, B.A. (Basle), M.S.A. (Inst. Allende, Mexico)
J. Crossan, Dip.Ind.Des. (Ontario College of Art)
P. Hogan, Dip.Graphic Design (Sheridan College)
P. Kipps, M.A. (Western)
Z. Markan, B.F.A. (Nova Scotia College of Art & Design)
J. Plow, Dip.Photo Arts (Ryerson)
R. Sewell, B.A. (Missouri)
H. Simkins, B.A. (York)
A. Smith, B.A. (Wellesley), M.A. (Mills), M.F.A. (California), Ph.D. (Toronto)
B. Zack, B.A. (Concordia), M.F.A. (Rutgers), R.C.A.

French

C. Cloutier-Wojciechowska, L.E.S.L., DES.M.A., M.P.H., DPS, DUP
F. Couture, B.A., M.A. (Toronto)
M.-P. Ducretet, L.Ph.L., Agr.E.M.S. (Lovanium), D.Ph.L. (Louvain)
C. Elkabas, B.A. (York), M.A., Ph.D. (Illinois: Urbana-Champaign)
P. Leslie, B.A. (Guelph), M.es.L. (Strasbourg)
J. Paterson, B.A., M.A., Ph.D. (Toronto)
N.J. Swallow*, B.A., M.A., Phil.M. (Toronto)
D.A. Trott, B.A. (U.B.C.), M.A., Ph.D. (Toronto)
H.H. Weinberg, B.A. (Roosevelt), M.A. (Northwestern), Ph.D. (Michigan)

German

J. Bielert, B.A. (Queen's), M.A., Ph.D. (Toronto)
C. Saas*, B.A. (Wisconsin), M.A., Ph.D. (Indiana)

History

S. Aster, B.A., M.A. (McGill), Ph.D. (L.S.E., London)
M. Dafoe, B.A. (Manitoba), M.A. (Queen's)
R.E. Johnson*, B.A. (Antioch), Ph.D. (Cornell)
C. La Vigna, B.A. (Skidmore), Ph.D. (Rochester)
L. MacDowell, B.A. (Toronto), M.Sc. (L.S.E., London),
Ph.D. (Toronto)
D.P. Morton, B.A. (R.M.C.), B.A., M.A. (Oxford), Ph.D.
(London)
A.C. Murray, B.A., Ph.D. (Toronto)
R.W. Pruessen, B.A. (C.U.N.Y.), M.A., Ph.D.
(Pennsylvania)
D.L. Raby, B.A. (Cambridge), Ph.D. (Warwick)
W.B. White, A.B. (Missouri), M.S., Ph.D. (Wisconsin)

Italian

G. Katz, B.A. (London), M.A., Ph.D. (Toronto)
M. Lettieri, B.A., M.A., Ph.D. (Toronto)
L.T. McCormick, B.A. (Toronto), A.M., Ph.D. (Rutgers)
G. Pugliese*, B.A., M.A., Ph.D. (Toronto)

Linguistics

D. James, B.A. (U.B.C.), M.A. (Cornell), Ph.D. (Michigan)

Philosophy

J. Brunning, B.A. (Madonna), M.A. (Detroit), M.A., Ph.D.
(Toronto)
J.V. Canfield, B.A. (George Washington), M.A., Ph.D.
(Brown)
D. Goldstick, B.A. (Toronto), B.Phil., D.Phil. (Oxon)
A. Gombay, B.A. (McGill), B.Phil. (Oxon)
W.J. Huggett, B.A., M.A., Ph.D. (Toronto)
G. Hunter, B.A. (Bishops), M.A., Ph.D. (Toronto)
B.D. Katz, B.A. (Manitoba), M.A., Ph.D. (Cornell)
E.J. Kremer, A.B. (St. Louis), Ph.D. (Yale)
C. McKinnon, B.A. (McGill), B.Phil. (Oxon)
C.G. Normore*, B.A. (McGill), Ph.D. (Toronto)

Religious Studies

W. Braun, B.A., M.A. (Toronto)
L.J. Elmer*, B.A., S.T.B. (Toronto), S.T.D.
(St. Thom. Aquinas)
M.J. Lavelle, B.A. (Windsor), M.A. (Marquette)
N.F. McMullin, B.A. (St. Francis Xavier), S.T.B.
(Toronto), M.Th. (Harvard), Ph.D. (British Columbia)
L.E. Schmidt, B.A., M.A., Ph.D. (Toronto)

Spanish

M. Cohen, Doc.Fil.Rom. (Madrid)
O. Hegyi*, Ph.D. (Toronto)
E.G. Neglia, B.A. (Roosevelt), M.A. (Illinois), Ph.D.
(Washington Univ.)

Life Sciences

Botany

J.B. Anderson, B.A. (Rhode Island), Ph.D. (Vermont)
P.W. Ball, B.Sc. (London), Ph.D. (Leicester)
W.R. Cummins, B.Sc. (McMaster), Ph.D. (Michigan State)
W.G. Fillion, B.A. (Queen's), M.Sc. (Guelph), Ph.D. (UWO)
P.A. Horgen*, B.A. (N.Iowa), M.Sc. (Iowa), Ph.D. (SUNY)
R.T. Irvin, B.Sc., Ph.D. (Calgary)
L.M. Kohn, B.Sc. (Vermont), Ph.D. (Cornell)
P.F. Maycock, B.A. (Queen's), M.Sc., Ph.D. (Wisconsin)
J. Svoboda, B.Sc. (U.W.O.), Ph.D. (Alberta)
G.R. Thaler, M.Sc. (McMaster), Ph.D. (Toronto)

Psychology

R. Abramovitch, B.A. (McGill), M.A., Ph.D. (Minnesota)
T.M. Alloway, B.A. (Knox), M.A., Ph.D. (Northwestern)
K. Blankstein, B.A. (McMaster), M.A., Ph.D. (Waterloo)
C.M. Corter, B.A. (Davidson), Ph.D. (UNC)
F.I.M. Craik, B.Sc. (Edinburgh), Ph.D. (Liverpool)
M. Daneman, B.A. (Witwatersrand), M.A. (Toronto), Ph.D. (Carnegie-Mellon)
A.S. Fleming, B.Sc. (Columbia), Ph.D. (Rutgers)
L. Krames, B.A., M.A., Ph.D. (Temple)
G. Moraglia, M.Sc., Ph.D. (Alberta)
M. Moscovitch, B.Sc. (McGill), M.A., Ph.D. (Penn)
P. Pliner*, B.S. (Purdue), Ph.D. (Columbia)
J. Polivy, B.S. (Tufts), M.A., Ph.D. (Northwestern)
B. Schneider, B.A. (Michigan), Ph.D. (Harvard)
M.L. Smith, M.Sc., Ph.D. (McGill)
S.E. Trehub, B.Com., M.A., Ph.D. (McGill)

Zoology

T.M. Alloway, B.A. (Knox), M.A., Ph.D. (Northwestern)
R.L. Baker, B.Sc. (Guelph), M.Sc., Ph.D. (Alberta)
N.C. Collins, B.A. (Pomona), Ph.D. (Georgia)
J.H. Fullard, B.Sc. (Toronto), M.Sc., Ph.D. (Carleton)
D.L. Gibo, B.A. (San Fern.Vall.State Coll.), Ph.D. (California)
D.T. Gwynne, B.Sc. (Toronto), Ph.D. (Colorado State)
G.K. Morris*, B.S.A. (Guelph), M.Sc., Ph.D. (Cornell)
D. O'Day, B.Sc., M.Sc. (U.B.C.), Ph.D. (Delaware)
G.A. Proteau, B.Sc. (Manitoba), Ph.D. (Laval)
R.R. Reisz, B.Sc., M.Sc., Ph.D. (McGill)
B.I. Roots, B.Sc., Ph.D., D.Sc. (London)
W.G. Sprules, B.Sc. (Queen's), M.A., Ph.D. (Princeton)
F.M. Szeicz, B.Sc., Ph.D. (London)

Physical Sciences

Astronomy

J.B. Lester, B.A. (Northwestern), M.Sc., Ph.D. (Chicago)
J.R. Percy*, B.Sc., M.A., Ph.D. (Toronto)

Chemistry

M. J. Damha, B.Sc., Ph.D. (McGill)
J.M. Deckers, L.Sc., Dr.Sc. (Louvain)
U.J. Krull, B.Sc., Ph.D. (Toronto)
A.J. Poë, B.A. B.Sc., M.A. (Oxford), Ph.D., D.Sc., D.I.C. (London), M.I.A. (Cambridge)
J.C. Poë, A.R.C.S., M.Sc., D.I.C. (London)
J.K. Reed, B.A. (Queen's), M.Sc. (U.W.O.), Ph.D. (Wisconsin)

E.A. Robinson, B.Sc., Ph.D., D.Sc. (London)
I.W.J. Still*, B.Sc., Ph.D. (Glasgow)
M.A. Winnik, B.A. (Yale), Ph.D. (Columbia)

Computer Science

A. Fournier, B.S. (I.N.S.A.-Lyon), M.Sc. (Montreal), Ph.D. (Texas)
G.S. Graham, B.Sc., M.Sc. (Toronto), M.A. (Princeton), Ph.D. (Purdue)
A.D. Jepson, B.Sc. (U.B.C.), Ph.D. (C.I.T.)
M.G. Luby, B.S. (M.I.T.), Ph.D. (Berkeley)
C. Rackoff*, B.S. M.Sc., Ph.D. (M.I.T.)
J. Sills, B.A. (Waterloo), B.Ed. (Toronto)

Geological Sciences

Emeritus Professor
(Physics, Earth & Planetary Science)
J.T. Wilson, C.C., O.B.E., B.A. (Toronto), M.A. (Cambridge), Ph.D. (Princeton), Sc.D. (Cambridge), D.Sc., D.Univ., L.L.D., F.R.S.C., F.R.S.
Geology & Geophysics
J.B. Currie, B.A. (McMaster), M.A., Ph.D. (Toronto)
H.C. Halls, B.Sc. (Sheffield), M.Sc. (Durham), Ph.D. (Toronto)
D.R. Kobluk, B.Sc., M.Sc. (McGill), Ph.D. (McMaster)
B. Murck, A.B. (Princeton), Ph.D. (Toronto)
J.G. Patterson, B.Sc. (Queen's), M.Sc. (Calgary), Ph.D. (V.P.I. & S.U.)
G.W. Pearce*, B.Sc., M.Sc. (Memorial), Ph.D. (Toronto)
P.-Y. F. Robin, M.Sc. (Toronto), Ph.D. (M.I.T.)
R.M. Stesky, B.Sc., M.Sc. (Toronto), Ph.D. (M.I.T.)

Mathematics

J. Alexander, B.Sc., M.Sc. (Kerala), M.A. (York)
S. Ben-David, M.Sc., Ph.D. (Hebrew University, Jerusalem)
J. Bland, B.Sc. (Queen's), Ph.D. (U.C.L.A.)
S. Boyer, B.A. (U.N.B.), Ph.D. (Cornell)
P.H.H. Fantham, M.A., D.Phil. (Oxford)
D. Geddes, B.A. (Toronto)
I.R. Graham*, B.Sc. (Toronto), Ph.D. (Princeton)
C. Grant, B.Sc. (Queen's), Ph.D. (M.I.T.)
A. Igelfeld, B.Sc. (M.I.T.)
H. Joshi, M.Sc., Ph.D. (Banaras Hindu University)
R.A. Mathon, Dipl. Ing. (Prague), M.Sc., Ph.D. (Toronto)
F.D. Tall, A.B. (Harvard), Ph.D. (Wisconsin)
S. Tanny, B.Sc. (McGill), Ph.D. (M.I.T.)
W.A.R. Weiss, B.Sc. (Saskatchewan), M.Sc., Ph.D. (Toronto)
N. Yui, B.S. (Tsuda College), Ph.D. (Rutgers)

Physics

R.F. Code, B.Sc. (Toronto), A.M., Ph.D. (Harvard)
D.J. Dunlop, M.A., Ph.D. (Toronto)
R.M. Farquhar, B.A., M.A., Ph.D. (Toronto), F.R.S.C.
J.T.C. McMullen, B.Sc., Ph.D. (Queen's)
G.W.K. Moore, B.Sc. (Guelph), Ph.D. (Princeton)
J.E. Sipe, Sc.B. (Brown), M.A. (Waterloo), Ph.D. (Toronto)
H.W. Taylor*, B.Sc., M.Sc., Ph.D. (Manitoba), C. Phys., F.Inst.P., F.I.Nuc.E.
H.M. Van Driel, B.Sc., M.Sc., Ph.D. (Toronto)
S.S.M. Wong, B.A. (Intl. Christian Univ., Tokyo), M.S. (Purdue), Ph.D. (Rochester)

Statistics

O. Fraser*, B.Com. (Dalhousie), M.Sc. (Toronto)

J. Scott, B.Sc. (Liverpool)

Survey Science

Emeritus Professor

L.A. Gale, B.A. (Queen's), D.T.S., C.L.S.

R.E. Clipsham, B.Sc. (Guelph), P.Eng., O.L.S.

I. de Rijcke, B.Sc. (Toronto), LL.B. (Windsor), O.L.S.

G. Gracie*, B.A.Sc. (Toronto), Ph.Eng. (I.T.C.), Ph.D.

(Illinois), P.Eng.

R.C. Gunn, B.A.Sc., M.A.Sc. (Toronto), M.Sc. (Ohio

State), P.Eng., O.L.S.

D.C. Kapoor, R. Adm., I.N. (Retd.), B.Sc. (Lawrence
College, India)

D.W. Lambden, B.Sc.F. (N.B.), Dip. T.C.P. (Sidney),

F.R.I.C.S., F.I.S.Aust., M.N.Z.I.S., C.L.S., O.L.S.

A. Tyrie, B.Sc., M.Sc., Ph.D. (Manchester)

P. Vanicek, Geodetic Engineer (Czech Tech. U.

Prague), Ph.D. (Prague)

A.M. Wassef, B.Sc. (Cairo), Ph.D. (London), A.R.I.C.S.

J.K. Young, B.Eng., M.Eng. (N.S.T.C.), P.Eng., C.L.S.,
O.L.S.

Adjunct Professors

G.R. Douglas, B.Sc. (Dalhousie), C.L.S.

J.H. O'Donnell, B.A.Sc. (Laval), Q.L.S., O.L.S.

T.C. Seawright, B.A. (W.L.U.), O.L.S.

DIVISION OF SOCIAL SCIENCES

Anthropology

- G. Crawford*, B.Sc. (Toronto), M.A., Ph.D. (N Carolina)
M. Kleindienst, B.A. (New Mexico), M.A., Ph.D. (Chicago)
J. Melbye, B.A. (Washington), M.A. (SUNY), Ph.D. (Toronto)
L. Reinhardt, B.F.A. (Maryland Inst. of Art), M.A. (Indiana), Ph.D. (S. Illinois)
B. Sigmon, B.A. (N.Carolina), M.A., Ph.D. (Wisconsin)
R. Vanderburgh, B.A. (Radcliffe), M.A. (Northwestern)

Commerce

- V. Aivazian, B.S. (M.I.T.), M.A., Ph.D. (Ohio State)
I.E. Berger, B.A., M.B.A. (Toronto)
L.J. Brooks, B.Com., M.B.A. (Toronto), F.C.A.
M.J. Bryant*, B.Com. (Canterbury), M.Com. (Auckland), M.A. (Ohio State), Ph.D. (Cincinnati), A.C.A. (N.Z.)
J.E.D. Conrod, B.Com. (Dalhousie), M.B.A. (Toronto), C.A.
C.E. Dilworth, B.A. (Western), M.B.A. (Toronto), C.A.
M.G. Evans, B.Sc., M.Sc. Technology (Manchester), M.I.A., Ph.D. (Yale)
V. Fortunato, B.Com., M.B.A. (McGill), C.M.A., C.A.
M.A. Kalymon, B.Sc. (Toronto), M.Phil., Ph.D. (Yale)
G.D. Quirin, B.A., M.A. (Alberta), A.M., Ph.D. (Princeton), C.F.A., C.M.A., (Chairman of Programmes)
M. Schneider, B.Com. (Toronto), M.B.A. (York), C.A.
W.J. Smieliauskas, B.S., M.S. (Illinois), Ph.D. (Wisconsin), C.P.A.
T.G. Sutton, B.A. (Sussex), M.B.A. (Cranfield), Ph.D. (Washington) F.C.A. (England and Wales)

Special Lecturers

- M. Mills, B.A. (Toronto), C.M.A.
R. Parsons, B.Com. (McGill), C.A.
J. Reeve, B.Comm. (Manitoba), M.B.A. (Chicago)
D. Saunders, B.A. (Toronto), C.A.
M. Sklar, B.Com. (Toronto), M.B.A. (Western)
C. Waite-Leonidas, B.A. (Waterloo), L.L.B. (Alberta)
P. Weintraub, B.Com. (Concordia), Dipl.Mgt. (McGill), M.B.A. (Manchester)

Economics

- V. Aivazian, B.S. (M.I.T.), M.A., Ph.D. (Ohio State)
G.J. Anderson, B.A. (Newcastle), M.Sc., Ph.D. (L.S.E., London)
D.J. Cox, B.A. (U.W.O.), Ph.D. (Queen's)
M.G.S. Denny, B.Sc. (M.I.T.), Ph.D. (Berkeley)
S.M. Eddie, B.Sc. (Minnesota), Ph.D. (M.I.T.)
M. Faig, Licenciatura (Barcelona), M.A., Ph.D. (Stanford)
A. Fishman, B.A. (City College of N.Y.), M.A. (Bar-Ilan University of Israel), Ph.D. (Hebrew University in Jerusalem)
J.E. Floyd, B.Com. (Saskatchewan), M.A., Ph.D. (Chicago)
H.E. Graham, A.B. (Harvard), B.A., M.Sc. (Oxford)
M.J. Hare*, B.Com. (Toronto)
A. Hosios, B.Eng. M.Eng., (McGill), M.A., Ph.D. (Princeton)
J.A. Hynes, A.B. (Johns Hopkins)
J.R. Irwin, B.A. (U.W.O.), M.A., Ph.D. (Rochester)
J.J. Madden, B.A. (Manitoba), M.A. (Toronto), Ph.D. (Cambridge)
A. Melino, B.A. (Toronto), Ph.D. (Harvard)
C. Pitchik, B.A. (McGill), M.Sc., Ph.D. (Toronto)

- D. Pokorny, M.A. (Charles), Ph.D. (Czech Academy of Sciences)
D. Rajagopal, Dipl. Volkswirt (U. of Munich), M.A., Ph.D. (Toronto)
S.A. Rea, A.B., Ph.D. (Harvard)
F. Reid, B.A. (U.B.C.), M.Sc. (L.S.E., London), Ph.D. (Queen's)
U. Segal, B.Sc., M.A., Ph.D. (Hebrew University of Jerusalem)
G. Slasor, B.A. (Carleton)
R. Ware, B.A., M.A. (Cambridge), Ph.D. (Queen's)
M. Wooders, B.A. (Edmonton), Ph.D. (Minnesota)

Geography

- H.F. Andrews, B.A., M.Sc. (London), D.Phil. (Sussex)
G.H.K. Gad, Dr.Phil. (Nurnberg), Ph.D. (Toronto)
A.P. Grima, B.A. (Manchester), M.A., Ph.D. (Toronto)
C.J. Houston, B.A., M.A., Ph.D. (Toronto)
A.G. Lewkowicz, B.Sc. (Southampton), M.A., Ph.D. (Ottawa)
S.H. Luk*, B.A., M.Phil. (Hong Kong), Ph.D. (Alberta)
T.F. McIlwraith, B.A., M.A. (Toronto), Ph.D. (Wisconsin)
D.S. Munro, B.Sc., M.Sc. (McGill), Ph.D. (McMaster)
R.R. White, B.A. (Oxford), M.Sc. (Penn State), Ph.D. (Bristol)

Political Science

- J. Barros, A.B., M.I.A., Ph.D. (Columbia)
S.B. Bashevkin, B.A. (Hampshire), M.A. (Michigan), Ph.D. (York)
R.S. Beiner, B.A., M.A. (McGill), D.Phil. (Oxford)
A. Braun*, B.A., M.A. (Toronto), Ph.D. (L.S.E., London)
M. Brownstone, B.Sc.A. (Manitoba), M.S. (Minnesota), D.P.A. (Harvard)
D.B. Cook, B.A., M.A., Ph.D. (Toronto)
R.B. Day, B.A., M.A., Dip. R.E.E.S. (Toronto), Ph.D. (London)
R. Gregor, B.A., M.A. (Toronto), Ph.D. (L.S.E. London)
D. Pokorny, M.A. (Charles), Ph.D. (Czech Academy of Sciences)
J.E. Smith, B.A. (Princeton), Ph.D. (Columbia)
P. Solomon, B.A. (Harvard), M.A., Ph.D. (Columbia)
G. White, B.A., (York), M.A., Ph.D. (McMaster)
N. Wiseman, B.A. (Manitoba), M.A., Ph.D. (Toronto)
D.A. Wolfe, B.A., M.A. (Carleton), Ph.D. (Toronto)

Sociology

- M. Blute, B.A., M.A., Ph.D. (Toronto)
D.F. Campbell, B.A. (St. Francis Xavier), M.A., Ph.D. (C. U. of America)
H. Friedmann, A.B. (U. Mich.), M.A., Ph.D. (Harvard)
A.R. Gillis, B.A., M.A. (Dalhousie), Ph.D. (Alberta)
B.S. Green, B.A. (Brandeis), Ph.D. (York)
W.E. Kalbach*, B.A., M.A., Ph.D. (Washington)
J.B. Kervin, B.A. (U.B.C.), Ph.D. (Johns Hopkins)
C.S. Milner, B.A., M.A. (Wisconsin), Ph.D. (Toronto)
E. Silva, B.A. (S.U.N.Y.), M.A., Ph.D. (Michigan)
J.H. Simpson, B.A. (Seattle Pac. Coll.), B.D., Th.M. (Princeton Th. Sem.), Ph.D. (Stanford)
A.L. Stein, B.A., M.A. (Cal. Berkeley), Ph.D. (Cal. Santa Barbara)

Librarians

M. Currie, B.A. (U.B.C.), M.L.S. (Cal. Berkeley)

E. Goettler, B.A., M.L.S. (Toronto)

D. McLean-Lowe, B.A., M.L.S. (Toronto)

S. McCaskill, B.A., (Manitoba), B.L.S., M.L.S. (Toronto)

N. Lypowecky, B.A., B.L.S. (Toronto)

J. Seel, B.A., B.L.S., M.L.S. (Toronto)

1 Admission Information

The handbook *A Great Tradition: The University of Toronto* contains complete information on requirements. To obtain this handbook, contact the Office of Admissions, 315 Bloor Street West, Toronto, Ontario, M5S 1A3; telephone 978-2190. The entrance requirements to Erindale are those of the University of Toronto, including the regulations for admission as a non-matriculant.

You may be admitted to the University of Toronto in one of the following ways, depending upon whether you have a sufficiently high standing in your previous academic work:

1. Upon successful completion of the full Ontario Secondary School Diploma (OSSD) (or equivalent).
2. With an acceptable degree from a recognized university.
3. With previous degree studies at a recognized university.
4. As a NON-MATRICULANT STUDENT with less than the full admission requirements.

Candidates Applying from an Ontario Secondary School - 1988-89

Applicants must be eligible for the Ontario Secondary School Diploma (OSSD)

Applicants must present credits in at least six acceptable Ontario Academic Courses (OACs), including the following:

1 credit in either English I or

OAC Anglais I or II

1 credit in Mathematics or a language other than English/Anglais

4 additional credits. No more than two OACs in any one subject will be accepted.

Subjects are as follows:

Biology

Business Studies (Accounting; Economics; Organizational Studies)

Chemistry

Classical Civilizations

Computer Studies

Contemporary Studies (Law; Politics)

Dramatic Arts

Eastern and Oriental Languages

English/Anglais (Language & Literature;

Writer's Craft; Studies in Literature)

Family Studies

French/Français (Core; Extended; Immersion)

Geography (World Issues; Canadian Environmental Systems)

German

Greek

Hebrew

History (Canada in a North American

Perspective; Modern Western Civilization)

Italian

Latin
 Mathematics (Algebra & Geometry;
 Calculus; Finite Mathematics)
 Music
 Native Studies
 Other Modern European Languages not
 listed separately here
 Physical & Health Education (Bio-Scientific
 Perspective; Socio-Scientific Perspective)
 Physics
 Polish
 Russian
 Science in Society
 Spanish
 Technological Studies (Analog & Digital
 Electronics; Computer Technology; Fluid
 Power & Control)
 Visual Arts

Students should choose OACs or equivalents that fulfill the prerequisites for university courses they intend to take. These prerequisites are listed both at the end of this section and after the description of each course later in the Calendar.

During the transition from the Ontario Secondary School Honour Graduation Diploma (OSSHD) to the OSSD, the Faculty will accept a combination of Grade 13 and OAC credits, but note that the following Grade 13 subjects are not accepted for admission purposes:
 Data Processing
 Law
 Marketing and Merchandising
 Multidisciplinary Studies
 Other Arts Studies
 Other Business Studies
 Physical and Health Education
 Secretarial Practice
 Technological Studies

The average required for admission varies from year to year, but will be higher than 65%. In addition, a student's overall academic record may be taken into consideration. Applications will be considered from candidates whose qualifications do not meet the normal requirements, but such candidates will have to offer written evidence of exceptional ability or of extenuating circumstances.

Admission with Transfer Credit

Candidates who have acceptable standing at other universities, or at other Faculties or Schools of this University including Scarborough College, may be considered for admission with transfer credit provided that the content of the studies for which credit is sought is fully equivalent to that of courses offered by the Faculty. The Faculty grants a maximum of five transfer credits for studies for which a previous degree or diploma was conferred, and a maximum of ten transfer credits for studies for which a degree has not been conferred.

Note: Regardless of the number of transfer credits granted, at least two of the three 300/400 series courses required for a Three-Year degree, or five of the six 300/400 series courses required for a Four-Year degree must be completed with suitable standing in this Faculty.

Admission as Non-Matriculants

Candidates at least twenty-one years of age who are Canadian citizens or permanent residents of Canada and do not hold the published admission requirements, and who have been resident in Ontario for at least one year, may apply for admission as non-matriculants. They must present proof of age, and must complete, with high standing, at least one of the Pre-University courses offered by Woodsworth College. Two of these courses are offered at Erindale.

(Those who have attended a post-secondary institution are not normally eligible for Pre-University courses.) All candidates should consult the Office of Admissions before enrolling in any Pre-University course.

Admission as Special Students

Special Students are those registered in the College but not proceeding towards a degree offered by the Faculty of Arts and Science. Most special students have completed degree studies and are taking further courses for purposes of their own, including admission to graduate studies. Further information concerning the requirements for admission is available from the Office of the Registrar, Room 2122, Telephone: 828-5331.

Admission as Visiting Students

Students with valid Letters of Permission from other accredited North American universities may register at Erindale College as Visiting Students, taking courses for transfer credit at their home university. Visiting Student status does NOT imply acceptance as either a degree student or a special student. Further information is available from the Office of the Registrar, Room 2122, Telephone: 828-5331.

Admission of Senior Citizens

Canadian citizens or permanent residents of Canada who are at least sixty-five years of age by the first day of the term may apply for admission to the College as part-time Special Students. They do not have to meet the academic requirements for admission and, when admitted, will be exempt from the payment of academic fees. Further information is available from the Office of the Registrar, Room 2122, Telephone: 828-5331.

Admission "On Probation"

Students who have previously studied in other Faculties or Institutions and who do not meet the Faculty's requirements for admission may on appeal be admitted subject to the following conditions:

1. They will be "On Probation" until the end of the session in which they attempt the fourth course in the Faculty, excluding transfer credits.
2. At the end of the session in which the fourth course is attempted they will be assessed as follows:
 - a) students with a Cumulative Grade Point Average (CGPA) of 1.50 or more will continue in good standing;
 - b) students with a CGPA of less than 1.50 but a Sessional GPA (SGPA) of 1.70 or more will continue "On Probation";
 - c) students with a CGPA of less than 1.50 and a SGPA of less than 1.70 will be suspended for one calendar year. On return to the Faculty they will remain "On Probation", and will be under the regulations for academic status outlined on page 34 of this Calendar.
3. While on probation students are ineligible to enrol for transfer credit in courses outside of the University. Should they enrol elsewhere, they will be expected to submit an official transcript of those studies at the time they request reregistration in the Faculty.

APPLICATION SHOULD BE MADE AS EARLY AS POSSIBLE IN THE YEAR FOR WHICH ADMISSION IS SOUGHT. THE FINAL DATES ARE:

For Summer Session 1988:

First Term: March 15, 1988
Second Term: May 15, 1988

For Winter Session 1988-89:

Full-time studies: June 1, 1988

Part-time studies:

First Term: June 1, 1988
Second Term: November 15, 1988

Note: Overseas applicants should apply at least six weeks before these dates.

Candidates who use the application forms issued by the Ontario Universities Application Centre are warned that the completed forms must be received by the Centre on or before the dates listed above.

Returning Students

If you are a DEGREE STUDENT in good standing in the Faculty of Arts and Science, you are eligible to follow the Registration Procedures. You do not re-apply for admission.

If you are a SPECIAL STUDENT in Arts and Science who has obtained standing, you are eligible to follow the Registration Procedures. You do not re-apply for admission.

For More Information Telephone:

Office of Admissions
(416)-978-2190
Erindale Campus
(416)-828-5331 or 5217

SECOND SCHOOL PREREQUISITES

The courses below have Grade 13/OAC prerequisites. In the language departments, students who have Grade 13/OAC language credits are assigned by the departments to higher-level courses appropriate to their level of competence. Students may also begin the study of many languages at the University without Grade 13/OAC preparation. Students should also refer to the Programmes of Study (p.44 and following), since many Specialist, Major and Minor Programmes include some of the courses below in their requirements.

Abbreviations in the Prerequisites column:
 / = "or";
 Geometry A & G = Ontario Academic Course Algebra and
 A = Grade 13 Algebra; Cal = Ontario Academic Course Calculus
 C = Grade 13 Calculus; FM = Ontario Academic Course Finite Mathematics
 R & F = Grade 13 Relations and Functions

Subject	Course	Prerequisite
Astronomy	AST120Y	Survey of Astronomy and Astrophysics R & F + Physics/Calc + A & G + Physics
Biology	BIO201Y BIO202H BIO203H BIO204H BIO205H	Diversity of Organisms Cell Biology Introductory Genetics Introduction to Physiology Ecology Biology - grade of 70% Biology - grade of 70% Biology - grade of 80% Biology - grade of 70% Biology - grade of 70%
Chemistry	CHM135Y CHM150Y	General Chemistry Basic Concepts of Chemistry Chemistry + R & F + C/ Chemistry + Calc/A & G Chemistry + C + R & F/ Chemistry + Calc + A & G
Computer Science	CSC108H CSC148H CSC150H	Computer Programming Introduction to Computing Introduction to Computer Science Grade XII Mathematics R & F + C/Calc + A & G R & F + C + A/Calc + A & G
French	FRE150Y FRE161Y FRE171Y FRE261Y FRE271Y	Introduction to French Literature Practical French 1 Language Practice I Practical French II Language Practice II French/French (Extended)/ French (Immersion) French, not Immersion French, not Immersion French (Immersion) French (Immersion)
Geological Sciences	GSC120H	Planet Earth Chemistry and Physics Grade XII or XIII
Mathematics	MAT108H MAT132Y MAT138Y MAT228H	Intro to Number Theory Calculus Calculus Linear Algebra A/A & G R & F + C/Calc A + R & F + C/Calc + A & G A or C/one OAC Math
Physics	PHY120Y PHY132Y PHY140Y	Introductory Physics For Life Science Students The World of Physics Principles of Physics R & F/A + C + Physics Physics + R & F/A + C Physics + R & F + C + A
Survey Science	SUR201H	Surveying I: Introduction A + R & F/A & G

2 Fees and Scholarships

Tuition fees are established by the Governing Council and set out in detail in the *Schedule of Fees*. Tuition fees normally consist of two parts: academic fees (including instruction and library) and incidental fees (including Hart House, Health Service, athletics, and student organizations). Additional fees may also be assessed to cover such items as instruments, microscopes and field trips. Fees are subject to change at any time by approval of the Governing Council.

The following information is intended only as a general guide and may be superseded by that in the *Schedule of Fees*, which should be consulted for accurate, detailed information.

Method of Payment of fees

Payment may be made at any branch of the Royal Bank of Canada, Canadian Imperial Bank of Commerce, Toronto Dominion Bank, Bank of Montreal or the Bank of Nova Scotia. Consult the *Schedule of Fees* for more information.

Payment may also be made by *Money Order*, *Bank Draft* or *Certified Cheque* in Canadian funds payable to "The University of Toronto"; all cheques must be *Certified*. Cash is accepted only if payment is made in person. Payment may be mailed or made in person at the Fees Department, 215 Huron St., Toronto, M5S 1A2.

Payment Deadlines (For the Winter Session)

Fees are due prior to registration and may be paid in full or a minimum payment consisting of 60% of academic fees and 100% of incidental fees may be made as indicated on the *Schedule of Fees*. All accounts must be paid in full by January 15th.

In order to avoid delays and long line-ups students are advised to pay their fees early by mail or at a bank.

Beginning September 15th all outstanding balances, regardless of the source of payment, are subject to a service charge of 1 1/2% per month compounded (19.56% per annum), which is first assessed on October 15th and calculated on the 15th of each month thereafter until the account is paid in full.

Students who have outstanding accounts may not receive official transcripts or diplomas and may not re-register at the University until these accounts are paid.

Scholarships, Awards, Financial Assistance

Sanctions on Account of Outstanding Obligations

The following are recognized University obligations: (a) tuition fees; (b) academic and other incidental fees; (c) residence fees and charges; (d) library fines; (e) bookstore accounts; (f) loans made by Colleges, the Faculty or the University; (g) Health Service accounts; (h) unreturned or damaged instruments, materials and equipment.

The following academic sanctions will be imposed on Arts and Science students with outstanding University obligations which have been reported to the Faculty in a timely and accurate manner:

1. Official transcripts of record will not be issued.
2. The University will not release either the official document (called the diploma) which declares the degree earned, nor provide oral confirmation or written certification of degree status for external enquirers.
3. Registration will be refused to continuing or returning students.

Payments made by continuing or returning students will first be applied to outstanding University debts and then to current fees.

Fees for Foreign Students

In accordance with the recommendations of the Government of Ontario, certain categories of students who are neither Canadian citizens nor permanent residents of Canada are charged academic fees of approximately \$5,100.00 per session. Refer to the *Schedule of Fees* for details.

Residence Fees

Residence fees are separate and will be approximately \$1,700.00 per annum for townhouse accommodation in 1988-89.

Scholarships are awarded on the basis of academic merit and fall into the following categories:

1. Admission Scholarships:
Value: \$800.00-\$1,600.00
2. In-Course Awards:
Value: \$50.00-\$1,500.00
 - a) Awards of a General Nature (not restricted to any one discipline)
 - b) Division of Humanities Awards
 - c) Division of Sciences Awards
 - d) Division of Social Sciences Awards
 - e) University Awards
 - f) Faculty of Arts and Science Awards
 - g) The Dean's Honour List

The nature of the awards may be monetary, book prizes, medals and in some cases a certificate. Full information on scholarships and other awards is available from the Scholarships and Financial Aid Office, Room 3095, South Building (828-5234).

Government Financial Aid

The Ontario Student Assistance Program (OSAP) consists of six plans:

- The Ontario Study Grant Plan
- Canada Student Loans Plan
- The Ontario Student Loans Plan
- The Part-time Student Loans Plan (Canada Student Loans)
- The Ontario Special Bursary Plan
- The Ontario Work-Study Plan

Information concerning the eligibility and assessment criteria may be obtained from the Office of Student Awards, 214 College St., Toronto (978-7950). Application forms are available in Room 3095, Erindale College or from the Office of Student Awards. Students from other Canadian provinces should apply through their provincial financial aid authority.

Bursaries

Supplementary financial assistance is available to students on the basis of financial need. Application forms may be obtained in November from the Scholarships and Financial Aid Office, Room 3095, Erindale College.

Students may wish to apply for one of the bursaries offered through the Office of Student Awards, 214 College Street, Toronto (978-7950). Please see the Scholarships and Financial Aid notice boards outside Room 3095 and in the North Building near the Cafeteria.

Distinction

Use of Awards to Pay Fees

a) *Ontario Student Assistance Programme (OSAP)*

Students may pay their fees out of their own funds without jeopardizing their Government assistance. Students wishing to use their Government awards to pay their first term fees should enclose the Notice of Assessment, which they received from the Ministry of Colleges and Universities, with their fees form. Payment of fees will then be deferred until the loan and/or grant is received by the student. Students who have applied for OSAP but have not received their Notice of Assessment by September should contact the Office of Students Awards or the Scholarships and Financial Aid Office at Erindale College to obtain a temporary deferral form. The signed deferral form should be enclosed with the fees form and sent to the Fees Office.

RETURNING STUDENTS: Fees deferrals will be available only for those students who applied for OSAP before June 15, 1988.

b) *Scholarships and Bursaries*

The Fees Department will credit students' fees accounts with any scholarships or bursaries paid by or through the University. A cheque for any remaining balance will be mailed to the student by the Fees Department.

Recognition of Exceptional Academic Achievement

Faculty Scholar and Dean's Honour List

This designation is given to students in the Faculty of Arts and Science having a cumulative Grade Point average of 3.50 or higher, at the end of each session in which the fifth, tenth, fifteenth and twentieth course has been passed. (For students enrolled in the Commerce and Finance Programme, the designation is given when the fifth, eleventh, seventeenth and twenty-third course is completed.)

A certificate signed by the Dean of the Faculty will be sent to each student at the end of the appropriate session.

There is no monetary prize for students named on the *Dean's Honour List*; however, each student receives a certificate signed by the Principal of Erindale College.

Distinction

Students who graduate with a Cumulative Grade Point average of 3.20 to 3.49 are described as graduates "With Distinction".

High Distinction

Students who graduate with a Cumulative Grade Point average of 3.50 or above are described as graduates "With High Distinction".

This is in addition to the many scholarships and other awards described in a separate publication.

3 Student Services

College Registrar

The Registrar's Office is the focal point for information and advice of all kinds and should be consulted whenever the student has questions concerning rules, regulations, degree requirements or problems of a personal or academic nature.

Registrar - Dr. L.T. McCormick, Room 2122, South Building, Telephone 828-5344

Academic Counselling

Students who have problems relating to the conduct of courses (lectures, tutorials, evaluation, work-load, etc.) and who find that they cannot resolve these difficulties with the instructor concerned, can obtain advice and assistance either from the Faculty Advisor, or from the Director of Academic Counselling for the College. The Director of Academic Counselling for Erindale is the Registrar, Dr. L.T. McCormick. Students registered in Faculties other than Arts and Science who have problems with the conduct of Arts and Science courses should go for advice either to the departmental Undergraduate Secretary or to the student advisor in the Dean's office of their own Faculty.

Faculty Advisors and Discipline Representatives can give detailed advice on individual courses and programmes that are centred in their Departments. Their names will be found at the beginning of the essay of each discipline in this Calendar. Many disciplines publish brochures or handbooks which are available at their offices. Students may also consult individual instructors.

Teaching - Learning Centre

Located in Room 3094 in the South Building, the Teaching-Learning Centre offers free advice about writing, learning and teaching. Hours are Monday - Thursday, 10 - 12 noon, 1 - 3 p.m. September to May. Regular services include:

Writing Laboratory

Individual help and small group seminars on:

- organizing essays
- preparing reports
- avoiding grammatical errors
- improving writing style
- study skills

START Seminars

Tips on researching and planning essays and reports. These are held at the beginning of each term in conjunction with the Library.

Teaching Tips

Advice on teaching techniques and on setting assignments.

For an appointment or further information call 828-5444 or visit Room 3094, South Building.

Library

Erindale College Library has an excellent and ever-growing collection of books, periodicals, slides, cassettes, clippings and other materials now numbering 234,500 items. This extensive library is staffed with people trained to help the student use the Library's resources.

In addition to the College Library, students and faculty have access to more than three million volumes of the University of Toronto Libraries on the St. George Campus. There is a regular book delivery service from the University of Toronto Libraries to the Erindale Campus. Telephone 828-5239.

Career Centre

Career Exploration:

individual appointments to help you with career and job search concerns. Workshops and Seminars are held throughout the year. Resumés/applications critiqued.

Career Information:

a library full of materials on careers, employment opportunities, education. Watch for Career talks and Career Nights in October and January.

Permanent Employment Services

On-Campus Recruitment Programme: for permanent and summer employment. Representatives from medium to large companies visit the University of Toronto to recruit graduating students and students for summer jobs. Check early in September.

Permanent Employment Service:

lists current permanent job openings available to new graduates.

Summer Employment Services:

begin to receive listings as early as October. Many Government Employment Programmes are advertised through this service.

Part-time Employment Listing Service:

lists part-time jobs available throughout Toronto and Mississauga areas and on the University of Toronto campuses.

St. George

Campus
Koffler Centre
214 College St
(College &
St. George)
978-8000

Erindale

Campus
South Bldg.
Room 3094
828-5451

Scarborough

Campus
Student Serv.
Room S-302F
284-3292

University Health Service

The University Health Service offers a comprehensive medical service for students on the Erindale Campus; treatment and advice are available throughout the year. Students are encouraged to discuss concerns about contraception, drug problems, unwanted pregnancies, sexual life and venereal disease.

Psychiatric consultation and counselling to assist students with emotional and social problems are available.

Students seek counselling for a wide range of concerns, including feelings of despondency, apathy, inadequacy or inferiority and with problems in areas of sexuality, drug use, parental conflict, dating, peer relationships, inability to concentrate and examination anxiety.

The primary responsibility of the Health Service is to the student; therefore, all consultations, medical and psychiatric, are strictly confidential and form no part of any "University Record". Information acquired from students will not be given to anyone at any time without the written permission of the student.

Office hours are:

Monday to Friday 9:00 a.m. - 5:00 p.m.

Telephone 828-5255

After 5:00 p.m. - Telephone 978-8030

Athletics and Recreation

The Athletics and Recreation Department and the Erindale College Students Athletic and Recreation Association (ECARA) plan and operate programmes for the Erindale College community and offer instruction, clubs, intramural and interfaculty leagues and college teams. With the exception of ice hockey and rowing, athletic programmes take place in the physical facilities of the University of Toronto. The Erindale Campus facilities include a gymnasium, weight training room, teaching studio, therapy centre, three squash courts, recreation room and fitness testing laboratory. Outdoor facilities include playing fields, outdoor swimming pool and six tennis courts (four' lighted). Erindale College teams compete in all University of Toronto interfaculty leagues and with other colleges and universities on an exhibition basis. In addition to the facilities and programmes on the Erindale Campus, students may use the facilities on the St. George Campus, as well as participate in their on-campus and intercollegiate programmes.

For inquiries about the athletic programme, telephone 828-5268/9.

Residences

With 231 places reserved for freshmen and 430 reserved for senior students, Erindale College boasts the largest on-campus residence facility at the University of Toronto. Situated on the beautiful treed campus, Erindale residents enjoy the community atmosphere created by the commercial townhouse development in which they live.

Depending on the unit, either four or six students share one house on a cooperative basis. Not being restricted by a food plan, students find they can save at least \$500 per year by purchasing and preparing their own food. Each townhouse is fully furnished and equipped with appliances. Living room, storage room, kitchen and dining area are on the main floor; bedrooms and a bathroom are on the upper level. Laundry facilities are situated in each phase of the residences.

Once in residence, all students are eligible to apply for residence the following year. Graduate and married student accommodation is also available. Students who wish to work on their bilingual skills may live together and create a "French House". All residences are within minutes of the library, classrooms and cafeteria facilities.

For 1988/89 residence fees are approximately \$1700 from September to May. For the summer months, from May to September, residence is approximately \$850.

For further information contact the Residence Office, Colman Place, Erindale Campus, Mississauga Road, Mississauga, Ontario L5L 1C6 or telephone 828-5286.

Services to Persons with a Disability

A Co-ordinator is available to provide personal support and liaison with academic and administrative departments on campus and with agencies off-campus, and to organize volunteers to assist in various ways.

The University is committed to making a major improvement in the accessibility of buildings, programmes and services over the ten-year period 1981 to 1991.

There are devices to aid print-handicapped students on all three campuses and personal amplification systems to aid hard-of-hearing students for loan from the Co-ordinator.

The office is located in the Koffler Student Services Centre, 978-8060 (also TDD), but the Co-ordinator can arrange to meet with members of the University at the Erindale campus, if requested to do so.

Office of the University Ombudsman

The Ombudsman assists in resolving grievances or complaints, and can recommend changes in academic or administrative decisions where this seems justified. In handling a grievance or complaint, the Ombudsman has access to all relevant files and information, and to all appropriate University officials.

The Ombudsman also provides information to members of the University about their rights and responsibilities, and the procedures to follow in order to pursue whatever business or complaint they may have. All matters dealt with by the Ombudsman are handled in a strictly confidential manner unless the individual involved approves otherwise. The Ombudsman is independent of all administrative structures of the University, and is accountable only to the Governing Council.

In setting up the Ombudsman's Office, a special effort has been made to ensure that its services are readily accessible to all members of the University. The office is located at 16 Hart House Circle, just south of the SAC building. Members of the University at Erindale Campus may arrange to meet with the Ombudsman at Erindale or at the St. George Campus, whichever is more convenient.

For information, advice or assistance, contact the Office of the University Ombudsman, University of Toronto, 16 Hart House Circle, Toronto, Ontario M5S 1A1 (Telephone 978-4874).

4 Student Organizations

Students' Administrative Council (SAC)

The Students' Administrative Council is the central student government for all full-time undergraduates. Members are elected from their local college or faculty.

Office: 12 Hart House Circle (978-4911).

The Erindale College Student Union (ECSU)

The Erindale College Student Union serves as an important link between students and the administration of the College and University. ECSU sponsors *Radio Erindale*, a newspaper, *Medium II*, various clubs, concerts, lectures, and a pub, *The Blind Duck*.

All undergraduate students of the College are members of ECSU and are entitled to attend meetings, sit on commissions and vote in the general election of officers to the Union. *The ECSU office is open all year, (828-5249).*

The Association of Part-Time Undergraduate Students

The Association of Part-time Undergraduate Students (APUS) represents all part-time undergraduate students at the University of Toronto.

APUS publishes a newsletter *Voice* every two weeks, an annual *Handbook for U of T Part-Time Undergraduates*, and a semi-annual Course Evaluation.

Office hours are:

Monday - Thursday: 9:00 a.m. - 9:30 p.m.

Friday and when classes are not in session: 9:00 a.m. - 5:00 p.m.

Office: Room 1089 Sidney Smith Hall, (978-3993).

The Erindale Part-Time Undergraduate Students' Association

EPUS is an independent organization of part-time students at Erindale College. It is funded through the APUS fees paid by Erindale part-time students.

EPUS has a four-person Executive Committee and operates on a class representatives system similar to that of APUS.

Office hours are:

Monday - Thursday: 1:00 p.m. to 9:00 p.m.

Office: Room 137, North Building (828-5422).

International Student Centre

The International Student Centre provides a meeting place for students from Canada and abroad to come together in organized programmes or informal gatherings in a multicultural setting. Office: 33 St. George Street, Toronto, (978-2564)

5 Academic Regulations

The following degrees are offered by the Faculty:

- B.A. Bachelor of Arts
(Three-Year or Four-Year)
- B.Sc. Bachelor of Science
(Three-Year or Four-Year)
- B.Com. Bachelor of Commerce

In this section the word "course" is taken to mean "full course", i.e. the equivalent of two half courses.

Choice of a Degree

Students may choose to have their degree conferred after having completed the requirements for either the three-year or four-year degree. Students who receive a three-year degree may return to complete the four-year degree requirements. They will not graduate a second time, but the transcript will show the degree earned. A three-year degree leads only to a four-year degree in the same field, i.e. a three-year B.A. leads only to a four-year B.A., etc., though five courses taken towards a degree in one field may, on petition, be counted towards a degree in a different field.

Degree Requirements;

Three-Year Degree (B.A. or B.Sc.)

To qualify for a three-year degree, a student must:

- a) Obtain standing in at least 15 courses, no more than six of which are 100 series.
- b) Obtain a grade of C- or better in each of three 300 or 400 series full course equivalents, ("Credit" in a "CR/NCR" ("Pass/Fail") course does not fulfill this requirement), and no more than one transfer credit may be counted).
- c) Complete the requirements of a Major Programme or one three-year Approved Area of Study.*
- d) Obtain a cumulative GPA of 1.50 or more.
- e) For the B.Sc. degree, take at least six 200 or higher series courses in Science, as defined below, if first registered in this Faculty before the Summer Session of 1980. For students first registered in or after the summer of 1980, the degree will depend on the Programme(s) in which the student graduates.
- f) Complete the Distribution requirement which consists of at least one full course equivalent from each of the following Divisions: Humanities, Science, Social Science.*

Programme Requirement

Four-Year Degree (B.A. or B.Sc.)

To qualify for a four-year degree, a student must:

- Obtain standing in at least 20 courses, no more than six of which are 100 series.
- Obtain a grade of C- or better in each of six 300 or 400 series full course equivalents, ("Credit" in a "CR/NCR" ("Pass/Fail") course does not fulfill this requirement), and no more than one transfer credit may be counted).
- Complete the requirements of a Specialist Programme or two Major Programmes, or one four-year Approved Area of Study, or two three-year Approved Areas of Study.*
- Obtain a cumulative GPA of 1.50 or more.
- For the B.Sc. degree, take at least nine 200 or higher series courses in Science, as defined below, if first registered in this Faculty before the Summer Session of 1980. For students first registered in or after the Summer Session of 1980, the degree will depend on the Programme(s) in which the student graduates.
- Complete the Distribution requirement which consists of at least one full course equivalent from each of the following Divisions: Humanities, Science, Social Science.*

NOTE: At various stages of the biological science teaching programme there may be occasions when anatomical, biochemical, physiological or pharmacological observations are made by students on themselves or on fellow-students. These include some diagnostic or immunization procedures in common use. Unless some valid reason exists, students are expected to participate in such exercises.

If any investigative work involving student participation does not form part of the teaching programme, participation is voluntary.

Bachelor of Commerce Degree (B.Com.)

The programme in Commerce and Finance begins formally when a student has obtained four credits which include (COM120H, 121H)/ (COM120H, CSC104H), ECO100Y and MAT132Y. The cumulative GPA in all courses completed and the marks obtained in COM120H, 121H, CSC104H, ECO100Y and MAT132Y will be taken into consideration in admitting students to the Commerce Programme.

To qualify for a Bachelor of Commerce Degree, a student must:

- Complete the requirements of the Commerce and Finance programme, including no more than six 100 series courses;
- Obtain a grade of "C-" or higher in each of at least six 300 or 400 series full course equivalents, ("Credit" in a "CR/NCR" ("Pass/Fail") course does not fulfill this requirement, and no more than one transfer credit may be counted).
- Obtain a cumulative GPA of 1.50 or more.
- Complete the Distribution requirement which consists of at least one full course equivalent from each of the following Divisions: Humanities, Science, Social Science.*

* Students registered at Erindale before the Summer Session of 1980 may complete a Programme or Programmes, but are not required to do so; nor are they required to complete the Distribution Requirement.

Programme Requirement

Students should be aware that completion of the Programme Requirement does not ensure that Degree Requirements have been met. Students are required to complete 6 full course equivalents at the 300/400 level for a Four Year degree (3 for a Three Year degree) including courses required for a programme. If the programme requires fewer courses at this level, any other 300/400 level courses may be counted toward fulfillment of this requirement.

Any variation made in Programme details for individual students does not in any way affect the Faculty's Degree requirements.

All degree students entering Erindale in or after the Summer Session of 1980 (except students previously registered in the Faculty of Arts and Science) *must enrol* in a Programme or Programmes when they *have passed their fourth course*. If admitted with transfer credit for four courses or more, they must do this when they first register in the Faculty. All students may (but are not required to) register in one three-course Minor Programme.

Distribution Requirements

Candidates for a 4 year degree MUST complete one Specialist and/or two major programmes.

Candidates for a 3 year degree MUST complete one Major Programme.

The following are the only other combinations.

Four Year	Three Year
a) 2 Specialists	2 Majors
b) 1 Specialist and 1 Major	

Courses with Science Credit

ANT203Y, 228H, 229H, 231H, 311H, 312Y, 324H, 330H, 332Y, 334Y, 339H, 416H, 430Y, 433H, 434H; APM; AST(except AST200H); BIO; CHM; CSC; ECO220Y; GGR117Y, GGR201H, 202H, 205H, 206H, 207H, 212H, 214H, 276H, 280H, 300H, 301H, 302H, 303H, 304H, 305H, 307H, 312H, 313H, 316H, 335H, 373H, 374H, 376H, 377H, 379H, 381H, 383H, 491Y; GSC; JBG230Y; MAT; PHY; PSY; SOC201Y; STA; SUR(except SUR251H, 352H, 353H, 454H, 455H, 456H, 458H).

Distribution Requirements

Humanities	Social Sciences	Science
Classics	Anthropology	Astronomy
Drama	Commerce	Biology
English	Economics	Chemistry
Fine Art	Geography	Computer Science
French	Political Science	Geological Sciences
German	Sociology	Mathematics
History	WDW260Y	Physics
Italian		Psychology
Linguistics		Statistics
Religious Studies		Survey Science
Spanish		
INE 112Y		

Note: INE courses (except INE112Y) may not be used.

The following courses are designated a natural science for distribution purposes only: GGR100Y, AST200H.

Some courses offered by the ANT and GGR departments are designated as Science credits for the B.Sc. degree and will be counted as Science courses for distribution purposes.

6 General Regulations

Registration refers to the process of establishing membership in the College for the purpose of attending courses and following a Programme of Study.

Students register by submitting a Registration form listing the courses to be undertaken and proof of payment of fees.

Detailed information about registration procedures is outlined in the *Timetable and Registration Information* booklet issued to students in July.

The last dates for registration in and withdrawal from courses are in the "Sessional Dates" section of this calendar and on the front cover of the *Timetable and Registration Information*.

Any student allowed to register after the end of the registration period will be charged a late registration fee of \$35.00 for the first day plus \$5.00 for each additional day thereafter.

Students should be aware that permission to register in the Faculty after the end of the registration period may be refused at any time.

Reregistration refers to former students who have not registered in the Faculty in two or more sessions (Winter or Summer) and now wish to resume their studies. They may request reregistration by completing a Request for Reregistration form. Consult the Sessional Dates for the deadline for submitting such requests. Students who, during the absence from this University, studied elsewhere and now wish transfer credit should follow the procedure outlined in the section "Courses of Other Universities".

Withdrawal means that the student does not intend to complete a course or courses.

Students who are dropping a course or courses must complete a Course Change form or otherwise notify the Registrar, in writing, before the final date to drop courses as specified in the Sessional Dates.

Students who are still registered in a course after the final date to withdraw will receive a grade for that course, even if they have never attended, have stopped attending or did not write the final examination.

Students who drop a course or courses before the deadline are entitled to a fees refund, the amount of which is determined by the date the Course Change form or other written notification is received by the Registrar. The amount of the fees refund is based on the information outlined

Courses

in Refund Schedule II in the *Schedule of Fees*. Students should pay strict attention to these dates to ensure that they receive the maximum refund.

Students who find it necessary to stop attending all of their courses are considered to have withdrawn from the University for the Session. They must notify the Registrar, in writing, of their intent before the last date to drop courses. Merely ceasing to attend classes will result in a grade of zero for each course.

Before a refund of fees will be issued to students withdrawing from a Session, they must:

- pay any outstanding fees,
- return any books to the Library and pay any outstanding fines,
- surrender Book Store charge cards and pay outstanding accounts,
- surrender their student card to the Registrar,
- vacate any laboratory or athletic lockers and return any equipment in their possession.

Transfer of Registration between Colleges:

Students who wish to transfer to another College for full-time studies must submit their written request to the Registrar before June 1. They must have completed the equivalent of four full courses and have a CGPA of at least 2.50. (Transfer credits may not be included.)

Responsibilities of Students

While Departmental counsellors and the Registrar's Office staff are always available to give advice and guidance, it must be clearly understood that it is the student's responsibility to ensure that:

- a) course selection is correct and complete,
- b) they have complied with all prerequisite and corequisite requirements,
- c) programme and distribution requirements have been met,
- d) deadlines and other regulations have been observed.

If there is any doubt, students should seek guidance from a responsible officer of the College. Misunderstanding, misapprehension, or advice received from another student will not be accepted as a reason for non-compliance with any regulation, deadline, programme or degree requirement.

Courses

The word "course" is used in two senses. In reference to a single course (such as "standing in a course" etc.) the word may be taken to refer equally to a full course or a half course. In reference to a given number of courses (such as the requirement of obtaining standing in at least fifteen courses for a three-year degree) the word refers to a number of full courses or the equivalent number in full and half courses.

To "pass a course" or "obtain standing in a course" normally means to obtain a mark of 50 or more in that course ("Credit" in "Credit/No Credit" courses). Note that a grade of "C-" is required in a specific number of 300 and 400 series courses before a degree may be granted and that "Pass" or "Credit" does not count as a "C" for this purpose.

Choosing Courses

1. Students may plan their own programme, selecting from among all courses offered, subject to the following rules:
 - a) The degree and programme requirements, distribution requirements and other regulations set out in the Calendar and its supplements must be satisfied.
 - b) All prerequisite, corequisite and exclusion requirements must be met.
 - c) No more than six 100 series courses may be taken for degree credit.
2. All courses will be for degree credit unless:
 - a) The course is a 100 series course and the maximum number of such courses allowable for degree credit has already been completed, or
 - b) Advance permission has been given by petition for courses to be taken as "extra courses". Courses already completed may not be designated as "extra" retroactively.
3. Students may not repeat any course in which they have already obtained standing. The only exception occurs when students require a 100 series course with a specific grade higher than "D" for entry to a limited enrolment programme. Students may repeat such a course once as an "extra" course, which will have no effect on the student's status or Grade Point Average. There are no supplemental examinations or provisions to "upgrade" a mark.

Prerequisites, Corequisites, Exclusions

Exclusion: Students may not enrol for degree credit in a course which lists as an exclusion a course that they are taking or which they have already passed. The second course taken will be listed as an "extra" course.

Prerequisite: A course (or other qualification) required as preparation for a course. If students consider that they have equivalent preparation, they may ask the Department concerned to waive the stated prerequisite.

Corequisite: A requirement to be undertaken concurrently with another course. The corequisite will be waived if a student has previously obtained standing in it or if the Department consents.

A student who withdraws from a course must also withdraw from any course for which it is a corequisite unless the Department giving the latter course agrees to waiver of corequisite.

Recommended Preparation: Background material or courses which may enhance a student's understanding of a course.

Course Loads

No full-time student may take more than six courses in the Winter Session nor more than six courses in any one term.

A full-time student who is on Academic Probation may take no more than five courses in the Winter Session.

The maximum course load in the summer session is 2.0 full course equivalents with no more than 1.5 courses per term. Note particularly that two A and/or B courses (or the equivalent in full and/or half courses) may not be taken.

For the purpose of calculating course loads, the following table should be used:

Suffix	Load Per Session	Load per Term
Y	1	1
H	1/2	1/2
A, B	1	2
F, S	1/2	1

As explained in the *Course Key* in Section 8, the suffixes, A, B, F, S, appear only in the *Timetable and Registration Information* and relate to the specific scheduling of the courses.

Students Restricted to a Reduced Course Load

Students who, on admission, were restricted to a part-time course load may not take more than 3.0 full course equivalents in the Winter Session (Sept. to May) nor more than 4.0 courses per term. (See above information on calculating course load by term.)

Otherwise, they may proceed at their own rate, and there is no time limit for completion of degree requirements.

These students may request to transfer to full-time studies when they have completed at least 4.0 full course equivalents in this Faculty and have a Cumulative Grade Point Average of 2.30.

Permission to take Courses on the St. George Campus

With the written permission of the Associate Chairman/ Discipline Representative, a student may take a course on the St. George Campus, provided that (i) five full courses have been completed, (ii) neither the course nor an equivalent course is available at Erindale, (iii) the same course at Erindale is in timetable conflict with a course required for a specialist or major programme and there is no suitable equivalent course available at Erindale.

In each subsequent Winter Session, until 14 credits have been completed, students may take no more than two courses on the St. George Campus unless more courses are needed to meet programme requirements. Students must file a request for such overloads with the Registrar, prior to the first day of class.

Courses of Other Divisions

Certain courses offered in other Faculties and Schools of the University may be appropriate for degree credit in the Faculty of Arts and Science. After consulting an academic advisor, students should petition through the Office of the Registrar, if possible well before the beginning of the course(s) concerned. Permission to take such courses for degree credit will be granted when students can establish that the requirements for an Arts and Science programme cannot be met by courses offered within the Faculty. Acceptance of petitions to take graduate courses is further subject to the requirements of the School of Graduate Studies. Special Students may enrol through this Faculty only in courses given by this Faculty or Scarborough College.

Courses of Other Universities (Letters of Permission)

A Letter of Permission is prior confirmation that an intended course at another university is acceptable for transfer credit. Students may take a maximum of 5 courses elsewhere for transfer credit but only one transfer credit may be used to satisfy the requirement of 300/400 level courses for the degree. To be eligible for a Letter of Permission, students must have a cumulative Grade Point Average of 1.50 or more.

Grades

Transfer Credits

Students who study elsewhere without a prior Letter of Permission may request transfer credit after completing the course(s). Credit will be granted if:

- the course is acceptable for credit in this Faculty,
- a grade of at least C- (60) is attained,
- the student had a cumulative grade point average of 1.50 or more in this Faculty at the time the course(s) were taken,
- the courses will not exceed the maximum allowable limit of transfer credits.

Requests for Letters of Permission and Transfer credit are available in the Registrar's Office. There is a \$25.00 non-refundable service charge for either type of request.

Students are assigned a grade in each course as follows:

Percentage	Grade	Value	Grade Definitions
90 - 100	A+	4.3	Excellent
85 - 89	A	4.0	
80 - 84	A-	3.7	
77 - 79	B+	3.3	Good
73 - 76	B	3.0	
70 - 72	B-	2.7	
67 - 69	C+	2.3	Adequate
63 - 66	C	2.0	
60 - 62	C-	1.7	
57 - 59	D+	1.3	Marginal
53 - 56	D	1.0	
50 - 52	D-	0.7	
Credit/No Credit:	CR*	No Value	
35 - 49	E	0.3	Inadequate
0 - 34	F	0.0	Wholly Inadequate
Credit/No Credit:	NCR	0.0	No Value

- * "Pass" or "Credit" does not count as "C-" for purpose of degree requirements, but transfer credits and Aegrotat standing in 300/400 series courses do count as such.

Grades of "E" and "F" are both *failures*. There are no supplemental examination privileges in the Faculty.

Other notations which do not have grade point values are:

- AEG AEGROTAT STANDING - on the basis of term work and medical evidence (Rarely granted). Authorized only by the Committee on Standing by Petition.
- SDF STANDING DEFERRED - completion of course delayed for medical reasons. Authorized only by the Committee on Standing by Petition.
- WDR LATE WITHDRAWAL - without academic penalty*. Authorized only by the Committee on Standing by Petition.
- XTR EXTRA COURSE - not for degree credit.

*The petition in this case is not for permission to withdraw, but is for removal of the academic penalty in cases where the withdrawal has been caused by circumstances beyond the student's control, arising after the last date for normal withdrawal.

Grade Point Average

The Grade Point Average (GPA) is the weighted sum of the grade points earned, divided by the number of courses in which grade points were earned. "No Credit" in a Credit/No Credit course will be included. A half-course will carry half the weight of a full course. Courses noted "AEG" or "PASS" or "Credit" are not included in the average, nor are transfer credits, courses taken on a Letter of Permission, or courses designated as "extra".

There are two types of Grade Point Average:

- a) The sessional GPA is based on the courses taken in a single session (summer or winter).
- b) The cumulative GPA takes into account all courses (other than extra courses) taken in the Faculty.

Both the sessional and cumulative GPA are used at the end of each session (summer or winter) in assessing academic status and in determining the rate of progress toward the degree.

The sessional GPA will be identical to the cumulative GPA for purposes of assessing a student's academic status in the first session.

A sessional and cumulative GPA will be calculated for all special students. The cumulative GPA of special students who have completed a degree in the Faculty includes all courses taken both as a degree student and as a special student.

The computation of an average will be delayed if "Standing Deferred" has been granted in any course.

Grading Regulations

These regulations summarize the Faculty's implementation of the University's Grading Practices policy (see page 40).

The Committee on Academic Standards administers the Grading Regulations and reviews course grades submitted by Departments. The Faculty, through this Committee, is responsible for assigning the official course grades, which are communicated to the students by the Faculty Registrar.

Each Chair appoints a departmental review committee to review grades submitted by instructors. The committee may ask for clarification of any anomalous results or distributions, or disparity between sections of the same courses. Both the departmental review committee, through the Chair, and the Faculty review committee, through the Dean, have the right, in consultation with the instructor of the course, to adjust marks where there is an obvious and unexplained discrepancy between the marks submitted and the perceived standards of the Faculty. Final marks are official, and may be communicated to the student only after the review procedure has taken place.

Grades, as an expression of the instructor's best judgment of each student's overall performance, will not be determined by any system of quotas.

As early as possible in each course and no later than the last date to add or withdraw from courses, the instructor will announce in a regularly scheduled class the methods by which student performance will be evaluated, and their relative weight in the final mark, including any discretionary factor. These methods must be in accord with applicable University and Faculty policies. Once the weight of each component of the course work is given, it may not be changed unless approved by a majority of the students present and voting at a regularly scheduled meeting of the class. **Instructors MUST assign, grade and return at least one significant assignment as early as possible, and at the latest BEFORE the final date to withdraw without academic penalty.** After the last date to withdraw from the course without academic penalty, no change in weighting may take place unless there is unanimous consent of all students present and voting, and notice must be given at the regularly scheduled class meeting previous to that at which the issue is to be raised.

All written work which has been evaluated should be returned with such detailed comment as the instructor deems appropriate, and time made available for discussion of it. Unclaimed term work must be kept by the instructor for six months beyond the end of the course.

In courses where only one form of evaluation is used, a single piece of work should not normally count for all of the final mark. Self-evaluation by individual students or groups of students is not permissible unless the specific consent of the Committee on Academic Standards is received.

Both essays (or equivalent work) and examinations (including term tests) are normally required for standing in courses. No term test having a weight greater than 25% of the final mark may be held in the last two weeks of classes at the end of any term. A Faculty final examination common to all sections of the course and counting for between one-third and two-thirds of the final mark must be held in each 100 series course, unless exemption has been granted by the Committee on Academic Standards.

In 200, 300 and 400 series courses, the Departments will decide whether or not an examination is appropriate, and report to the committee. The relative value of each part of a written examination must be indicated on the question paper. The ratio of term marks to examination mark will be the same for all sections of multi-section courses which have final examinations.

Academic Status

NOTE: Regulations Nos. 1, 2 and 3 apply to both Degree and Special students who have attempted at least four courses in the Faculty.

1. A student shall be *on academic probation* who:
 - a) has a cumulative GPA of less than 1.50 or
 - b) returns from suspension.
2. A student who, at the end of any session (Winter or Summer) during which he is *on probation*:
 - a) has a cumulative GPA of 1.50 or more shall be in good standing,
 - b) has a cumulative GPA of less than 1.50 but a sessional GPA of 1.70 or more shall continue on probation,
 - c) has a cumulative GPA of less than 1.50 and a sessional GPA of less than 1.70 shall be *suspended for one calendar year* unless he has been suspended previously, in which case he shall be suspended *for three years*.
3. A student who, having been suspended for three years, is again liable for suspension shall be *refused further registration* in the Faculty.

NOTE: There are two sessions (Summer and Winter) in each calendar year and status is assessed following each of them.

Students who are neither On Probation, Suspended nor Refused Further Registration are described as *In Good Standing*.

The status of students as established under the regulations in effect before the GPA system was adopted in September 1976 will remain unchanged until he has completed one full session (Summer or Winter) after September 1976, at which time it will be re-assessed in terms of the GPA, provided that at least four courses in total have been attempted.

Courses attempted are those in which a student was enrolled on the last date for withdrawal, unless the academic penalty has been removed by petition.

Petitions

A petition is a written request for waiver of a particular regulation. Petitions are submitted in the form of a letter to the Registrar of the College and are considered in confidence by or on behalf of the Committee on Standing. This committee, which meets monthly, is charged with interpreting and administering the rules of the Faculty and has the authority to grant exemptions to the regulations and to attach conditions to their decisions.

Students who feel they have genuine difficulties complying with a particular regulation(s) should consult the Registrar as soon as they know a problem exists.

The most common petitions are those which concern the completion of term work and the writing of final examinations. The guidelines for submitting such petitions are:

Term Work - all term work must be submitted on or before the last day of classes in the course concerned, unless an earlier date is specified by the instructor. Students who, for reasons beyond their control, cannot meet the deadline may request an extension of time. Such requests must be filed before the end of term and supported by a medical certificate or other documentation.

Final Examinations - petitions for deferred examinations must be submitted before the last day of the examination period and supported by medical documentation.

- The medical certificate must state clearly the nature of the illness and its duration and show that the doctor was consulted at the time of the illness.
- Students who are too ill to come to the Registrar's Office on the day of the examination should call 828-5244 to report the illness and come in as soon as possible to file the petition.
- Students who become ill during the examination should report to the Health Service or the Registrar's Office immediately.
- If the petition is not based on medical grounds, all supporting documentation should be attached.

Deferrals are granted only for medical reasons and the Committee will not consider requests based on travel or personal plans.

SUCCESSFUL PETITIONS WILL NOT EXCUSE YOU FROM ANY OF THE WORK OF THE COURSE, BUT MAY ALLOW YOU TO WRITE YOUR EXAMINATION AT A LATER DATE AND/OR AN EXTENSION OF TIME TO COMPLETE TERM WORK.

Faculty Final Examinations

Appealing the Decision of the Committee on Standing

All appeals must be filed within ninety days of the decision being appealed. Decisions of the Erindale Sub-Committee on Standing are appealed to the Committee on Standing of the Faculty of Arts & Science.

Further appeals may be made to the Academic Appeals Board of the Faculty and to the Academic Appeals Board of the Governing Council.

Information about these procedures is available from the Office of the Registrar.

Faculty Final Examinations

Final examinations are held at the end of both terms in each session. Students who make plans which may interfere with writing examinations do so at their own risk. *No special arrangements will be made in the event of conflicts nor will deferred examinations be allowed.* Information regarding dates and times of examinations will not be given by telephone.

Students taking courses during the day may be required to write evening examinations, and students taking evening courses may be required to write examinations during the day.

Rules for the Conduct of Examinations

1. No person will be allowed in an examination room during an examination except the candidates concerned and those supervising the examination.
2. Candidates must appear at the examination room at least twenty minutes before the commencement of the examination.
3. Candidates shall bring their signed student cards and place them in a conspicuous place on their desks. Candidates registered in the Faculty of Arts and Science must have a student registration card bearing their photograph.
4. Bags and books are to be deposited in areas designated by the Presiding Officer and are not to be taken to the examination desk or table. Students may place their purses on the floor under their chairs.
5. The Chief Presiding Officer has authority to assign seats.
6. Candidates shall not communicate with one another in any manner whatsoever during the examination.
7. No materials shall be brought into the room or used at an examination except those authorized by the Chief Presiding Officer or Examiner.
8. Candidates who bring any unauthorized material into an examination room or who assist, or obtain assistance from other candidates or from any unauthorized source, are liable to penalties under the Code of Behaviour, including the loss of academic credit and expulsion.
9. In general, candidates will not be permitted to enter an examination room later than fifteen minutes after the commencement of the examination, nor to leave except under supervision until at least half an hour after the examination has commenced.

10. Candidates shall remain seated at their desks during the final ten minutes of each examination.
11. At the conclusion of an examination, all writing shall cease, and the Chief Presiding Officer may refuse to accept the papers of candidates who fail to observe this requirement.
12. Examination books and other material issued for the examination shall not be removed from the examination room except by authority of the Chief Presiding Officer.
13. Smoking in the examination room is not permitted.

Outside Centre Fee

Students granted permission to write an examination at a centre outside Toronto must submit with their application a fee of \$25.00 for each examination to be written. Such permission is granted only in the most extreme circumstances.

Checking of Marks;

All requests for re-reading of examinations, checking of marks and photocopies of examinations must be filed within six months of the final examination period. After that date, the examinations are destroyed.

Re-Reading of Examination

- a) Obtain a photocopy of the examination from the Registrar's office. These are available after the release of final marks. There is a fee of \$10.00 for each examination.
- b) Complete a Request for Remarking of Final Examination.
- c) In completing the request, demonstrate that your answer is substantially correct, using evidence other than your own opinion, such as: lecture notes, textbooks, similar questions in tests, etc.
- d) If the Registrar is satisfied that you have made a case for remarking, your form will be attached to the original examination and sent to the Department. If you have not made a valid case, no further action will be taken unless you request that the matter be referred to the Committee on Standing. They will rule only on whether or not you have made a satisfactory case for rereading.

Clerical Check of Marks

- a) Complete a Request for Clerical Check of Marks and submit it with the fee of \$10.00.
- b) Demonstrate by your calculation and/or explanation where you think the error has been made.
- c) If the Registrar is satisfied that you have a valid case, the form will be sent to the Department with any relevant documents. They will check that all answers have been marked, all term work has been accounted for and that the marks have been added correctly. **THEY WILL NOT REREAD THE PAPER NOR REMARK TERM WORK.**

If your mark is changed as a result of either of these requests, the \$10.00 fee will be refunded.

The following are the possible results of your requests:

- the mark may be changed upward,
- there will be no change in the mark,
- if another error is detected during the clerical check or rereading, the mark may be lowered.

Student Records

Student Records;

The "official student academic record" is maintained by the Faculty, which shall designate the document, form or medium containing the official version and how official copies of such information will be identified. Student academic records refer to information concerning admission to, and academic performance at, this University. The "official student academic record" contains:

- i) Registration and enrolment information.
- ii) Results for each course and academic period.
- iii) Narrative evaluations of a student's academic performance, used to judge the student's progress.
- iv) The basis for a student's admission, such as the application for admission and supporting documents.
- v) Results of petitions and appeals.
- vi) Medical information relevant to a student's academic performance, furnished at the request or with the consent of the student.
- vii) Letters of reference, whether or not they have been provided on the understanding that they shall be maintained in confidence.
- viii) Personal information such as name, address, telephone number, citizenship, social insurance number.

a) *Access by a student:* A student may examine and have copies made of his academic record as defined above, with the exception of that portion of the record which deals with his application for admission to the academic division concerned and letters of reference which have been provided on the understanding that they should be maintained in confidence. A student's request to examine any part of his "official student academic record" shall be made in writing and shall be complied with within thirty days of receipt. Students may challenge the accuracy of their academic record with the exception of the materials specifically excluded above and may have the record supplemented with comments so long as the sources of such comments are identified and the official student academic record remains securely within the custody of the academic division. Reference to such comments would not necessarily appear on official academic reports such as the transcript or the Statement of Results.

(Note that access to medical information shall only be granted to members of the teaching and administrative staff with the prior expressed or implied consent of the student and, if applicable, in the case of a medical assessment, the originator (physician, etc.) of such.)

- b) *Access by University Staff:* Members of the teaching and administrative staff of the University shall have access to relevant portions of a student's academic record in the performance of their duties.
- c) *Access by University of Toronto Campus Organizations:* Student organizations in the University of Toronto may have access to all information available freely to persons outside the university (see d (i) below) and to the residence address and telephone number of the student, for the legitimate internal use of that organization.
- d) *Access by others:*
 - i) By the act of registration, a student gives implicit consent for a minimal amount of information to be made freely available to all inquirers:
 - the academic division(s) and the session(s) in which a student is or has been registered,
 - degree(s) received and date(s) of convocation.
 - ii) Any other information shall be released to other persons and agencies only with the student's prior expressed written consent, or on the presentation of a court order, or in accordance with the requirements of professional licencing or certification bodies, or the Ministry of Colleges and Universities for an annual enrolment audit, or otherwise under compulsion of law. A record shall be kept of permissions granted to any persons or agencies outside the university for access to a student's academic record.
 - iii) General statistical material drawn from academic records not disclosing the identities of students may be released for research and informational purposes.

Refusal of Access

The University reserves the right to withhold access to Statements of Results and transcripts of students who have outstanding debts. The University may also choose not to release the official diploma to such students nor to provide written certifications of degree on their behalf.

Custody Of Student Academic Records

Academic records are normally under the custodial responsibility of the academic divisions. Fifty years after a student has ceased to be registered, all such records become the responsibility of the University Archivist and become open to researchers authorized by the University of Toronto.

Personal Information

Personal information provided at the time of admission is verified and brought up to date by the Office of the Registrar at the time of registration in subsequent sessions. This information is a vital part of the student's official University record and is used to issue statements of results, transcripts, graduation information, diplomas and other official documents. The University is also required by law to collect certain information for the Federal and Provincial Governments; this is reported only in aggregate form and is considered confidential by the University. Any change in the following must therefore be reported immediately to the Office of the Registrar:

1. Legal name
2. Permanent or home address and telephone number
3. Sessional address and telephone number
4. Social Insurance Number
5. Citizenship status in Canada
6. Marital Status.

Student Card

The student card is a wallet-sized card bearing the student's photograph, used for identification purposes within the University, such as evidence of registration in the Faculty and in a particular College, participation in student activities, Athletic Association privileges, and identification at Faculty examinations.

The loss of the student card must be reported promptly to the Office of the Registrar, and the card must be surrendered if a student withdraws from the University or transfers to another College or Faculty. There is a fee of \$5.00 for replacement of lost cards.

Transcripts

The transcript of a student's record reports the standing in all courses attempted, along with course size and course average, information about the student's academic status including record of suspension and refusal of further registration, and completion of degree requirements and of a Programme.

Course results are added to each student's record at the end of the session. Transcripts issued during the second term do not include "A" and "F" courses completed in the first term.

Individual courses from which a student withdraws within the normal time limit are not shown. However, the date of withdrawal from a session (i.e. withdrawal from the last course in which a student was enrolled) is recorded. Therefore, when a student taking only a single course withdraws from it, the date is recorded since it constitutes withdrawal from a session.

Copies of the transcript will be issued at the student's request, subject to reasonable notice. Requests should be submitted in person or by writing the Faculty of Arts and Science, Sidney Smith Hall, 100 St. George St., Toronto, M5S 1A1. There is no charge for transcripts issued within the University. A fee of \$5.00 for the first copy, plus \$2.50 for each additional copy, will be charged for transcripts to all other destinations. Payment *MUST* accompany such requests.

Transcripts issued directly to students do not bear the official seal of the Faculty. The Faculty Office cannot be responsible for transcripts lost or delayed in the mail.

Transcripts are not issued for students who have outstanding financial obligations with the University.

Discipline

Code of Behaviour in Academic Matters

The Governing Council of the University of Toronto has approved a Code of Behaviour which sets out clearly the standard of conduct in academic matters expected of members of the University community. The Code is enforced by the Provost and the Disciplinary Tribunal. Below are extracts from the Code, covering offences and sanctions as they apply to students. The full text of the Code is available from the Faculty Office and the Office of the Registrar.

Academic Offences

In order to protect the integrity of the teaching, learning and evaluation processes of the University it shall be an offence for any member, either at the University, at another educational institution or elsewhere:

- a) i) to use or possess unauthorized aid or aids or obtain unauthorized assistance in any academic examination or term test or to use unauthorized assistance in any other form of academic work;
- ii) to represent as that of the member in any academic work submitted for credit in or admission to a course or programme of study or to fulfill a requirement for any degree, diploma or certificate, any idea or expression of an idea or work of another;
- iii) to submit for credit in any course or programme of study, without the knowledge and approval of the member to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or programme of study in the University or elsewhere;
- iv) to submit for credit in any course or programme of study any academic work containing a purported statement of fact or reference to a source which has been concocted;
- b) to forge or in any other way alter or falsify any academic record or to utter or make use of any such forged, altered or falsified record;
- c) to remove books or any other library material from a University library without proper authorization, to mutilate library material or misplace it, or in any other way to deprive another member or members of the University of the opportunity to have access to library resources;

- d) to make use of a computer for an unauthorized purpose or for any purpose other than that for which the computing access code was granted, or to access, use, alter, modify, read or copy datasets that do not belong to the member or are not intended for the use of the member, or to interfere with the legitimate use of a computer by another member or members, or to make use of an account or access code not legitimately belonging to the member or without the knowledge and permission of a member to whom it legitimately belongs; or
- e) to access any University computer system without proper authorization, to modify, remove, use or prevent access to its programs or datasets, to damage or mutilate a computer, or in any way to deprive another member or members of the University of the opportunity to have legitimate access to computer resources.

Sanctions

- 1. One or more of the following sanctions may be imposed by the Dean where a student or former student admits to the commission of an offence:
 - a) censure;
 - b) assignment of a mark of zero or a failure for the piece of academic work in respect of which the offence was committed;
 - c) assignment of a penalty in the form of a reduction of the final mark;
 - d) denial of privileges to use any facility of the University, including library and computer facilities;
 - e) assignment of a mark of zero or a failure for the course in respect of which the offence was committed;
 - f) suspension from attendance in a course or courses, a programme, an academic Division or unit, or the University for a period of not more than twelve months.
- 2. One or more of the following sanctions may be imposed by the Tribunal upon conviction of any student or former student of any offence:
 - a) the sanctions enumerated in clause 1 above;
 - b) suspension from attendance in a course or courses, a programme, an academic unit or Division, or the University for such period of time up to five years as may be determined by the Tribunal;

University Grading Practices Policy

- c) assignment of a mark of zero or a failure for any completed course or courses in respect of which any offence was committed or in any course or courses which have not been completed at the time the offence was committed;
- d) recommendation of expulsion from the University;
- e) recommendation for revocation of one or more degrees, diplomas and certificates.
Sanctions 1e through 2e are normally recorded on the transcript for a minimum period of five years.

NOTE: Withdrawal from a course prior to an offence being discovered will not preclude or affect any proceedings at the Departmental or decanal level, or prosecution before the Tribunal. After an offence is alleged, students may not withdraw from a course.

University Grading Practices Policy;

The purpose of the University Grading Practices Policy is to ensure:

- a) that grading practices throughout the University reflect appropriate academic standards;
- b) that the evaluation of student performance is made in a fair and objective manner against these academic standards;
- c) that grade scales, while remaining suited to the particular circumstances of every division, are compatible with each other;
- d) that the academic standing of every student can be accurately assessed even when courses have been taken in different divisions of the University and evaluated according to different grade scales.

Application of Policy

The Policy applies to all individuals and committees taking part in the evaluation of student performance in degree, diploma, and certificate credit courses (hereafter referred to as courses), excluding courses in the School of Graduate Studies.

Amendment to Policy

Amendments to the Policy shall be recommended to the Academic Affairs Committee. Changes to the divisional regulations on grading practices shall be part of each division's annual report to the Admissions, Curriculum and Standards Subcommittee.

Distribution of Policy

A copy of the Grading Practices Policy as well as the description of the grade scale used in a division and the substance of divisional regulations indicated in Part II of this Policy shall be published in the Calendar of the division. Similarly a copy shall be given to all students upon initial registration and to all instructors and others, including teaching assistants, involved in the evaluation of student performance.

The Policy is three parts: Part I deals with grades, Part II outlines grading procedures to be adhered to in divisional regulations adopted as part of this Policy, and Part III is an administrative appendix available upon request from the Office of the Provost.

PART 1: GRADES

Meaning of Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has command of the course materials.

1.1 A grade assigned in a course is not an assessment of standing within a program of studies. To determine the requirements for credit and standing in a program of studies, the academic regulations of the division in which the program is offered should be consulted.

1.2 Grades for each course shall be assigned with references to the following meanings (which may be expanded in the divisional regulations under Part II):

Excellent
Good
Adequate
Marginal
Inadequate
Wholly Inadequate.

Grade Scales

1.3 Once a judgment on the performance of the student has been made, the following grade scales may be used in accordance with divisional practice:

- a) a compatible letter grade scale,
- b) the numerical scale of marks and/or
- c) the scales Honours/Pass/Fail and Credit/No Credit.

Grades vs. Scores

1.4 Grades should always be based on the approved grade scales. However, students may find that on any one evaluation they may receive a numerical or letter mark that reflects the score achieved on the test or essay. The cumulative scores may not be directly identified with the final grade. Grades are final only after review by the divisional review committee described below.

1.5 A table of correspondence and a translation table are defined in the Appendix for each of the letter grade scales referred to in 1.3(a) in order to allow the conversion, when necessary, of a grade assigned from one scale to the corresponding grade in another. It should be noted that these tables are not to be used to translate a score to a grade directly.

Grade Reporting

1.6 Only one letter scale, as referred to in 1.3(a) may be used in a division for assigning grades, but the numerical scale and the H/P/FL and CR/NCR scales, as referred to in 1.3(b) and (c) respectively, may also be used. The grades assigned in a course, however, must all be from the same scale.

1.7 Grades in each course shall be assigned according to the practice of the division offering the course. Grades in each course shall be reported according to the practice of the division administering the program in which the student is registered (the reporting division).

- a) Grades shall be reported as assigned when the division offering the course is also the reporting division, when the offering and reporting divisions use the same grade scale, and when the grades are assigned from the H/P/FL or CR/NCR scales.
- b) In all other cases, grades shall be reported as converted to the scale used by the reporting division, and the conversion shall be made according to the tables of correspondence and translation tables defined in the Appendix.
- c) With the exception of H/P/FL and CR/NCR scales, two different letter grade scales may not be used on the same transcript.
- d) A grade not reported in the form originally assigned by the offering division must on request be made available to the student in that form by the reporting division.

1.8 All non-grade symbols used in reporting course results must correspond to the University-wide standard. A list of the currently approved symbols and their meanings is given in the Appendix A.2.

1.9 The information in grade reports and transcripts must be communicated to the user, whether within or outside the University, in a clear and meaningful way. To that end, transcripts issued by every division of the University must indicate the relationship between the divisional grade scale, the grade meanings, the basic letter grade scale, whether refined or unrefined by plus and minus signs, and the scale or numerical marks as well as the translation table. A list of non-grade symbols and meanings shall also be included in the transcript.

PART II: GRADING PROCEDURES

Approval of Grades

Grades shall be recommended by the instructor to the chair or division head. The grades shall then be reviewed and approved following the divisional review procedure. Grades shall not be reported or released to students as official until the divisional review procedure has been carried out. The divisional review constitutes final approval of grades except when grades are changed on appeal.

Divisional Review Committee

II.1 In each division, a committee chaired by the divisional head or a designate, and where appropriate, an additional committee structure, with the chairs (or their designates) of departments or other academic units of divisions serving as chairs, shall:

- a) administer the implementation of the University Grading Practices Policy at the divisional level and oversee the general consistency of grading procedures with the division;
 - b) formulate, approve, and administer the division's specific regulations concerning the grade scale or scales to be used, the assignment of non-grade symbols for course work, classroom procedures and approved methods of evaluation;
 - c) review, adjust and approve course grades recommended by instructors. The grades recommended for any individual student in the professional faculties may be adjusted according to his or her performance in the course or program as determined by the committee. The divisional committee has the final responsibility for assigning the official course grade.
- e) of an examination shall be indicated to the student. In the case of a written examination, the value shall be indicated on the examination paper.
 - f) Commentary on assessed term work and time for discussion of it shall be made available to students.
 - g) At least one piece of term work which is a part of the evaluation of a student performance, whether essay, lab report, review, etc., shall be returned to the student prior to the last date for withdrawal from the course without academic penalty.

- g) Grades shall be recommended by the instructor in reference to the approved grade scales on the basis of each student's overall performance.

In formulating their own regulations divisions may add to items (a) to (g) and may adopt fuller or more specific provisions, for example in place of such terms as "a simple majority" (b), "one-third of the final grade" (d), or in particularizing the evaluation methods referred to in (a) and (b). Divisions may make reasonable exemptions in circumstances such as field or clinical courses where adherence to the above procedures is not possible.

Classroom Procedures

II.2 To ensure that the method of evaluation in every course reflects appropriate academic standards and fairness to students, divisional regulations governing classroom procedures must be consistent with the practices below.

- a) As early as possible in each course (and no later than the division's last date for course enrolment) the instructor shall make available to the class, and shall file with the division or department, the methods by which student performance shall be evaluated. This should include whether the methods of evaluation shall be essays, tests, examinations, etc., the relative weight of these methods in relation to the overall score, and the timing of each major evaluation.
- b) After the methods of evaluation have been made known, the instructor may not change them or their relative weight without the consent of at least a simple majority of the students enrolled in the course. Any changes shall be reported to the division or department.
- c) Student performance in a course shall be assessed on more than one occasion. No one essay, test, examination, etc. should have a value of more than 80% of the grade. Criteria for exemption may be determined by the division.
- d) In courses that meet regularly as a class there shall be an examination (or examinations) conducted formally under divisional auspices and worth (alone or in the aggregate) at least one-third of the final grade. Criteria for exemption may be determined by the division. The relative value of each part

Grade Review and Approval Process

II.3 The following principles and procedures shall govern the grade review and approval process.

- a) The distribution of grades in any course shall not be predetermined by any system of quotas that specifies the number or percentage of grades allowable at any grade level.
- b) However, a division may provide broad limits to instructors setting out a reasonable distribution of grades in the division or department. Such broad limits shall recognize that considerable variance in class grades is not unusual. The division may request an explanation of any grades for a course that exceed the limits and hence appear not to be based on the approved grade scales or otherwise appear anomalous in reference to the Policy. It is understood that this section shall only be used when the class size is thirty students or greater. Each division shall make known in the divisional Calendar the existence of any such limits.
- c) The criterion that the Divisional Review Committee shall employ in its evaluation is whether the instructor has followed the University Grading Practices Policy. The Review Committee shall not normally adjust grades unless the consequences of

allowing the grades to stand would be injurious to the standards of the University, or the class in general.

- d) Membership on the Divisional Review Committee may include students but should not include members of the divisional appeals committee(s).
- e) Where grades have been adjusted by a divisional committee, the students as well as the instructor shall be informed. On request, the students or the instructor shall be given the reason for the adjustment of grades, a description of the methodology used to adjust the grades, and a description of the divisional appeal procedure.
- f) Where a departmental review committee changes course grades, the faculty office shall be so informed. Having done so, the faculty office shall relay this information, upon request, to the students or the instructor with a description as to the reason for the change and the methodology used.
- g) Past statistical data, including drop-out rates, mean arithmetic average, etc. should be provided to the Divisional Review Committee as background information where available. The committee will not use information exclusively to judge whether a specific grades distribution is anomalous. Rather, the information should provide part of the basis for an overall review of grades in a division.
- h) Where class grades have been changed, or when the Divisional Review Committee had reservations about the grades, the issue will be taken up with the instructor by the division or department head, with a view to ensuring that the Grading practices Policy is followed in future.

Appeal Procedure

Every division shall establish divisional appeal procedures. Students may appeal grades according to the procedures established for that purpose in the division. The appeal may be made whether marks have been altered by the review process or not. These procedures shall be outlined in the divisional Calendar, and available upon request at the faculty or registrar's office.

Student Access to Examination Papers II.4

- a) All divisions should provide access to copies of the previous year's final examination papers and other years' papers where feasible. Exemptions may be granted by an appropriate committee of the division or department.
- b) All divisions should provide students with the opportunity within a reasonable time to review their examination paper where feasible. A recovery fee should be set to cover administrative costs including photocopying.
- c) All divisions should provide, in addition to the customary re-reading of papers and the re-checking of marks, the opportunity for students to petition for the re-reading of their examination where feasible. A cost recovery fee should be set and returned where appropriate.

Conflict of Interest

II.5 Where the instructor or a student has a conflict of interest, or is in a situation where a fair and objective assessment may not be possible, this should be disclosed to the chair or division head who shall take steps to ensure fairness and objectivity.

7 Programmes

Students should note that they are required to complete 6 full course equivalents at the 300/400 level for a Four Year degree (3 for a Three Year degree) including courses required for a programme. If the programme requires fewer courses at this level, any other 300/400 level courses may be counted toward fulfillment of this degree requirement.

"COURSES" = full courses or the equivalent in full and/or half courses.

Individual Areas of Study

Students wishing to pursue a programme other than (or in addition to) those offered by the disciplines or listed below may apply, through their Dean, for an individual Approved Area of Study. Such students should submit a coherent grouping of courses designed to meet their individual needs.

Individual Approved Area of Study (4 Year)

S04085

9 to 16 full course equivalents (including pre-requisites)

Individual Approved area of Study (3 Year)

M04085

5 to 7 full course equivalents (including pre-requisites)

Animal Behaviour (B.Sc)

(Consult Department of Psychology)

Specialist programme (Interdisciplinary) S24755

10 full courses or an equivalent number of half courses are required in a programme of 20

courses

PSY100Y

BIO201Y, 203H, 204H, 205H

PSY290Y

BIO304H/PSY390H/399H

BIO318Y, 360H, 361H

JBP359Y

BIO404H, 442H

PSY400Y/BIO481Y

Other BIOLOGY and PSYCHOLOGY courses of direct interest to students in the Animal Behaviour Specialist Programme include: BIO235Y, 317Y, 319H, 440Y, 260H, 280Y, 399H

NOTE: Students already enrolled in the Animal Behaviour Programme should contact Prof. T.M. Alloway regarding changes in the Biology portion of their programme.

Anthropology (B.A.)

Specialist Programme S17755

9 courses are required in a programme of at least 20 courses

ANT100Y

ANT203Y, 204Y, 200Y/201Y/226Y, 207H/228H/
231H/311H/412H

4 ½ additional ANT courses

Major programme M17755

6 courses are required in a programme of at least 15 courses

ANT100Y

ANT203Y, 204Y, 200Y/201Y/226Y
and 2 additional ANT courses

Minor Programme R17755

3 courses are required

ANT100Y

and 2 additional ANT courses

Anthropology (Physical) (B.Sc.)

Specialist Programme S15105

9 courses are required in a programme of at least 20 courses

ANT100Y

ANT203Y, 204Y, 200Y/201Y/226Y, 228H/231H/
311H/412H

4 ½ additional courses selected from the list of
ANT science courses/BIO360H/361H

Major Programme M15105

6 courses are required in a programme of at least 15 courses

ANT100Y

ANT203Y, 204Y, 200Y/201Y/226Y
and 2 additional courses selected from the list of
ANT science courses/BIO360H/361H

NOTE: For ANT Science courses, see page 27

Art and Art History

See Fine Art

Astronomy (B.Sc.)

Major Programme M22045

7 courses are required in a programme of at least 15 courses

AST120Y, MAT138Y, PHY140Y/132Y with 70% and
P.I.

GSC237H/AST321H(G), MAT214H and 233H/
238Y, PHY240Y

AST422H(G) and any two of AST225H(G),
210H(G), 251H, 423H(G)

(AST225H(G) is strongly recommended)

Astronomy and Physics (B.Sc.)

Combined Specialist Programme S02715

16 courses are required in a programme of at least 20 courses

AST120Y, MAT138Y, PHY140Y

AST225H(G), GSC237H/AST321H(G), MAT238Y,
MAT228H, MAT214H/251Y, PHY224H, 240Y,

257H, 258H, MAT311H/351Y, MAT334H,
PHY351H(G), 352H(G), 354H(G), 355H(G),

356H(G), AST420Y(G), 422H(G), 423H(G),

425H(G); 1.5 full courses chosen from

PHY331H(G), 431H(G), 439H(G), 450H(G),

451H(G), 452H(G), 453H(G), 454H(G), 456H(G),

458H(G), 461H(G), 462Y(G), 466H(G)

Students are urged to satisfy their distribution requirements in their first year.

Biochemistry (B.Sc.)

(Consult Department of Chemistry)

NOTE: Enrolment in this Programme is restricted and selection will be based on the Grade Point Average in First Year courses.

Specialist programme S17625

12 ½ courses required in a programme of at least 20 courses

CHM135Y/150Y, MAT132Y/138Y, PHY132Y/140Y,
BIO202H, 203H/204H/206H

CHM221H, 231H, 240Y

CHM341H, 347H, 360Y, 371H and one 300 series

BIO/CHM/MGB/PSL full course equivalent

BCH471Y(G) and four of CHM461H, BCH421H(G)
to 430H(G), MGB410H, 420H

(CHM447H in the years when BCH424H is not
offered)

NOTE(1): The first three years of the Biochemistry
Specialist programme can be taken wholly at
Erindale but students must take some fourth-year
courses on the St. George Campus.

NOTE(2): Enrolment in BCH471Y (G) is limited.

Biology (B.Sc.)

Specialist programme S23645

15 courses are required in a programme of at least 20 courses

1. CHM135Y/150Y, MAT132Y/138Y

2. One full course equivalent from the following:
PHY120Y/132Y/140Y/CSC148H and 158H/
GGR100Y/GSC120H and 121H/ PSY100Y

3. BIO201Y, 202H, 203H, 204H, 205H. (Not more

than one full course equivalent from this group may be taken in the first year)

4. BIO360H
5. 8.5 additional BIO options. It is recommended that students in the Specialist programme include at least one half course from each of four of the following groups of courses:

Group I
Ecology and Field Biology

JBG 230Y
BIO 235Y
300H
301H
302H*
316H
330Y
332Y
417Y
430Y*
433H*

Group II
Biology of Whole Organisms

BIO 206H
311H
319H
335H
354H
355H
356H
456H*

Group III
Genetics

BIO 314H
375H
440Y
442H
470Y

Group IV
Cell Biology

BIO 315H
352H
353H
370Y
375H
452H
455H
471H

Group V
Physiology and Behavior

BIO 304H
310H
312H
318Y
JBP 359Y
BIO 404H
420H*
424H*

Group VI
Additional Courses

BIO 361H
480H
481Y
482H

*Offered in alternate years

- 1) Students wishing to emphasize cell biology, molecular biology, microbiology, physiology or genetics should take CHM 240Y in second year.
- 2) CHM240Y, CHM360Y, JBP359Y, and JBG230Y will automatically be accepted as equivalent to BIO course options.
- 3) Additional courses in cognate studies such as Computer Science, Physics, Chemistry, Geological Sciences, Psychology and Anthropology are recommended as valuable non-Biology options and may also be used as substitutes for not more than two Biology options. Only *one* Anthropology course may be used as a substitute for a Biology option in the Specialist programme. Students should consult with the faculty advisor before registration if they wish to substitute a non-Biology course for a Biology option.

4) Environmentally-oriented students should consider including BIO235Y (Field Biology) in their first year programme.

5) No substitute statistics course will be allowed for BIO360H except under extenuating circumstances.

6) Certain Erindale Biology courses will be treated as equivalent to corresponding St. George campus courses in satisfying requirements for the following St. George specialist programmes: Biology and Mathematics, Biology and Physics, Microbiology, Nutrition and Food Science, Paleontology, Pharmacology and Physiology. *Students who intend to begin these programmes at Erindale should consult a Biology advisor as early as possible.*

Major Programme M23645

7 courses are required in a programme of at least 15 courses

1. CHM135Y/150Y, MAT132Y/138Y
2. BIO201Y, 202H, 203H, 204H, 205H
3. Two additional full-course equivalents in Biology from the 300 or 400 series

Note: Students may also consider an interdisciplinary Specialist or Major Programme in Environmental Science (B.Sc.) offered jointly by Biology and Geography.

Canadian Studies (B.A.)

Faculty Advisor: Professor J. Dutka

"The most valid and compelling argument for Canadian Studies is the importance of self-knowledge, the need to know and to understand ourselves."

The Canadian Studies Programme at Erindale offers both a Specialist and a Major concentration drawn from courses in Anthropology, Commerce, Economics, English, Fine Art, French, Geography, History, Philosophy, Political Science and Sociology. Interdisciplinary in nature, the programme is nonetheless designed so that students can fulfill entrance requirements of the Faculty of Education or the School of Graduate Studies by a careful selection of courses in other areas. Students wishing to complete a specialist or major certification in Canadian Studies must notify and register with the Faculty Advisor.

Specialist Programme S07285

11 courses are required in a 20 credit degree programme

- a) In the first and second years:
HIS262Y, POL100Y, ENG252Y, FRE161Y/
FRE171Y (or, if exemption is granted, a course in French Canadian literature in the original language)
- b) In the third and fourth years:
GGR245Y, INE401Y, 402Y, and 4 courses with a disciplinary, thematic or chronological co-

herence chosen, with the approval of the advisor of the programme, from the list of approved courses offered on either the Erindale or the St. George Campuses.

Major Programme M07285

7 courses are required in a 15 credit degree programme
HIS262Y, POL100Y, ENG252Y, FRE161Y/FRE171Y (or, if exemption is granted, a course in French Canadian Literature in the original language), GGR245Y; and 2 courses chosen from those approved for the Specialist programme, both of which must be at the 300/400 level

For course descriptions of INE401Y and INE402Y, see under Interdisciplinary Studies.

Students may also be interested in the major programme in Literatures and Languages in Canada, administered through New College, but open to Erindale students. For further information, consult the Faculty Advisor.

Chemistry (B.Sc.)

Specialist programme S13765

14 ½ courses are required in a programme of at least 20 courses
CHM135Y/150Y, MAT132Y/138Y, PHY132Y/140Y
CHM211H, 221H, 231H, 240Y; MAT214H, 233H/238Y/251Y
CHM311H, 321H, 322H, 331H, 332H, 341H, 391H, 393H

CHM489Y; two additional 400 series CHM full-course equivalents and one additional 300/400 series CHM/MAT/another Science full-course equivalent

NOTE(1): Additional 400 series CHM courses available include CHM414H, 445H, 452H, 453H, 461H, 485H at Erindale, plus the selection of CHM400 series courses at St. George.

Major programme M13765

5 ½ courses are required in a programme of at least 15 courses
CHM135Y/150Y, MAT132Y/138Y, CHM211H, 221H, 231H, 240Y

Two 300 series CHM full-course equivalents.

NOTE(1): Limitations on CHM135Y as a prerequisite for certain 200 series CHM courses

NOTE(2): MAT prerequisite for CHM321H

NOTE(3): For a balanced training in Chemistry, students should take CHM311H, 321H, 331H, 341H.

Chemistry and Biochemistry (B.Sc.)

Specialist programme S12135

15 courses are required in a programme of at least 20 courses

CHM135Y/150Y, MAT132Y/138Y, PHY132Y/140Y, BIO202H, 203H/204H/206H

CHM211H, 221H, 231H, 240Y; MAT214H, 233H/238Y/251Y

CHM321H, 311H/331H, 341H, 347H, 360Y, 371H; CHM391H/393H

CHM447H(G)/BCH424H(G), BCH471Y(G)/CHM489Y, one additional BCH400(G) series half-course, one additional CHM400 series half-course (preferably organic), one additional 400 series BCH or CHM full-course equivalent

NOTE(1): Enrolment in BCH471Y(G) is limited

NOTE(2): Additional 400 series CHM courses available include CHM414H, 445H, 452H, 453H, 461H, 485H at Erindale, plus the selection of CHM 400 series courses at St. George.

Chemistry and Geology (B.Sc.)

Specialist programme S05795

See Geology and Chemistry

The Chemistry and Geology programme is intended for students with a strong chemistry background who wish to undertake graduate work in this area or who may be contemplating professional careers in the oil and mining industries. 15 courses are required in a programme of at least 20 courses.

Chemistry (Physical) (B.Sc.)

Specialist programme S20985

14 courses are required in a programme of at least 20 courses

CHM150Y, MAT138Y, PHY140Y
CHM221H, 231H, 240Y (CHM211H recommended)

MAT238Y, 251Y, PHY231Y, CHM321H, 322H, two of (CHM331H, 332H, 341H), MAT311H/351Y

1 ½ 400 series CHM courses, PHY333H, 334H, any other 300 or 400 series CHM full-course equivalent

NOTE(1): 400 series CHM courses available at Erindale include 414H, 445H, 452H, 453H, 461H, 485H, 489Y.

NOTE(2): Choice of fourth-year courses must be approved by the Faculty Advisor. The Physical Chemistry programme includes the study of more physics than the Chemistry Specialist programme and is intended for students interested in the more physical areas of chemistry.

Cinema Studies (B.A.)

Faculty Coordinator: Professor J. Bielert (German)

Minor Programme R0797

3 full courses are required in a programme of at least 15 courses

INE112Y and 2 additional courses from: GER251Y/ITA240Y/340Y

Classics

Classical Civilization (B.A.)

Consult Department of Classics

Major programme M03825

6 full courses are required in a programme of at least 15 courses; including at least one at the 300 level

1 course from: CLA100Y/105H(G)/200Y(G)/202H/205Y(G)/215H(G)/216H(G)/217H(G)/224H/225H(G)/261Y/300Y/PHL200Y/303H/304H

1 course from: CLA130Y(G)/232H/234Y/240Y/241Y/250Y(G)/255Y(G)/340Y(G)/345Y(G)/350Y/351Y(G)/352Y(G)/354Y/355H/360Y(G)/361Y/400Y/401H/NES471Y(G)

1 FAH course in ancient art

3 courses from any of the above groups or any GRK/LAT (except GRK150Y(G)/151H(G)/245Y(G)/250Y(G)/350Y(G)/355Y(G)/450Y(G)/CLA201H)

The programme is designed to meet the needs both of students seeking a broad survey of Greek and Roman culture and of specialists in other Humanities subjects who require background knowledge of Classics for their particular interests, whether literary, historical or philosophical.

Greek and Roman History

Major programme M21115

(with language requirement)

7 courses are required in a programme of at least 15 courses

3 full course equivalents from the following list:

CLA130Y(G)/232H/234Y/240Y/241Y/250Y(G)/255Y(G)/340Y(G)/351Y(G)/352Y(G)/354Y/355H/360Y(G)/361Y/400Y/401H

4 courses in GRK and LAT, at least one in each language numbered 210 and above

Major programme M21115

(without language requirement)

6 courses are required in a programme of at least 15 courses

6 full course equivalents from the following list of which at least 2 must be 300 series: CLA130Y(G)/216H(G)/217H(G)/232H/234Y/240Y/241Y/250Y(G)/255Y(G)/340Y(G)/345Y(G)/350Y/

351Y(G)/352Y(G)/354Y/355H/360Y(G)/361Y/400Y/401H

1 course may be replaced by a comparable course in FAH/HIS/NES approved by the Department

Minor programme R21115

Any 3 CLA courses listed in the major programme

Commerce

Commerce and Finance (B.Com.)

Specialist programme S22735

(Limited enrolment)

This programme leads to the Bachelor of Commerce degree and requires a total of 23 credits.

Before they are considered for enrolment in the programme students must take at least four courses (credits) including (COM120H, 121H)/(COM120H, CSC104H), ECO100Y and MAT132Y. Students choosing a concentration in Accounting must take (COM120H, 121H) in First year. Marks in COM120H, 121H, CSC104H, ECO100Y and MAT132Y and the cumulative GPA may be considered in selection of candidates.

REQUIREMENTS FOR COMPLETION OF THE B.COM. PROGRAMME

7.0 Commerce

(COM120H, 121H)/(COM120H, CSC104H, COM222H)/COM100Y
COM220Y
COM337Y

Additional COM courses to make a total of at least 7 (CSC104H and POL209Y/317Y may be counted as COM courses)

7.0 Economics

ECO200Y/206Y; 202Y/208Y; 220Y/227Y/
STA242Y/262Y; ECO203Y/221Y/
222Y/322Y; (311H, 366H)/(325H, 326H)/
(364H, 365H)/COM310Y

1 additional 300+ series ECO course

Note: Students accepted into the Programme prior to 1985 may substitute a 200 series ECO credit for the additional 300+ series ECO credit.

1.0 Mathematics

MAT132Y

3.0 *Full course equivalents* other than Commerce and Economics. At least one of these must be a humanities course.

5.0 *Full course equivalents* from any discipline including Commerce and Economics.

Higher Years:

Students **may** choose one of the five areas of concentration listed below.

- a) **ACCOUNTING**
 - i. COM320Y
 - ii. At least one of COM420Y, 423Y
 - iii. At least two of COM421H, 426H, 428H
- b) **ADMINISTRATION**
 - i. COM222H
 - ii. At least two of COM362H, 363H, 460H
 - iii. POL209Y/317Y/COM360Y
- c) **FINANCE**
 - i. COM222H
 - ii. At least three of COM330H, 431H, 438H, 439H
- d) **MARKETING**
 - i. COM222H
 - ii. COM350Y, 452H, 453H

e) **GENERAL BUSINESS**

Any selection of Commerce courses to bring total Commerce courses to 7

NOTES:

1. *The programme requirements in effect at the time the Student is admitted to the programme must be met in order to fulfill the degree requirements.*
2. *Students are advised to complete five courses in first year. It should be noted that six courses should be completed in each of the subsequent years.*
3. *Students interested in combining a B.Com. degree with an Economics Specialist Programme should refer to the appropriate Programme of Study for details.*

Major programme (B.A.) M11115

(Limited enrolment)

The programme leads to the Bachelor of Arts degree and requires 7 courses in a total of 15

First Year: (COM120H, 121H)/(COM120H,

CSC104H), ECO100Y, MAT 132Y

Students must take at least 4 courses including the ones listed above before being considered for enrolment in the programme. Marks in COM120H, 121H, CSC104H, ECO100Y, and MAT132Y and the cumulative GPA will be considered in selection of candidates.

Higher Years:

1. ECO220Y/227Y/STA242Y/262Y
2. COM221H/220Y, 331Y/337Y, 350Y/351H, 362H/363H/WDW103Y/260Y
3. Other COM courses, if necessary, so that the total number of courses is 7. PHL/PHI295H may be counted as a COM course.

NOTES:

1. *The programme requirements in effect at the time the Student is admitted to the programme must be met in order to fulfill the degree requirements.*

Communications

This programme may be completed only by students who entered it in 1987-88 or earlier. For programme requirements please refer to Calendar 1987-88 or earlier.

Computer Science (B.Sc.)

Specialist programme S16885

(Limited enrolment)

10 ½ courses are required in a programme of at least 20 courses

CSC148H, 158H, MAT138Y, CSC228H, 238H, 258H, MAT140Y(G)/225Y(G)/228H, 238Y, CSC324H, 350H, 364H, 378H, MAT334H/315H(G)/344H(G), STA262Y

Any one of CSC351H(G)/446H(G)

Any one of CSC438H(G), 448H(G), 465H(G), 478H(G)

Two half-courses from the following, of which at least one half-course should be taken from Group I:

Group I: CSC418H(G), 428H(G), 434H(G), 458H(G), 468H(G), 484H(G), 488H(G)

Group II: CSC340H(G), 354H(G), 372H(G), 444H(G), ELE385H(G), 454H(G) *Recommended option:* MAT104H

NOTE: Students are advised to arrange their programme so as to complete the requirements for the Major in Computer Science by the end of the third year.

Major programme M16885

(Limited enrolment)

6 ½ courses are required in a programme of at least 15 courses

CSC148H, 158H, MAT132Y/138Y

CSC228H, 258H, MAT140Y(G)/225Y(G)/228H

6 CSC half-courses from the following:

At least two of CSC324H, 340H(G), 354H(G), 372H(G), 378H, 418H(G), 428H(G), 434H(G), 444H(G), 458H(G), 468H(G), 484H(G), 488H, ELE385H(G)

At least two of CSC238H, 350H, 351H(G), 364H, 438H(G), 446H(G), 448H(G), 465H(G), 478H(G)

The additional two half-courses may be taken from any of the two categories above, or any of CSC300H(G), 318H(G)

Minor programme R16885

3 courses are required

CSC148H, 158H, MAT132Y/138Y, and any two of CSC228H, 238H, 258H

Computer Science for Data Management (B.Sc.)

Specialist programme S19225

(Limited enrolment)

13 ½ courses are required in a programme of at least 20 courses

CSC148H, 158H, ECO100Y, MAT132Y/138Y

CSC228H, 238H, 258H, COM102H/120H,

ECO206Y/208Y, MAT234Y/250Y

CSC324H, 350H, 351H(G), 364H, 378H,

COM220Y, MAT140Y(G)/225Y(G)/ 228H,

STA262Y, CSC434H(G)

Any two of CSC340H(G), 354H(G), 372H(G),

418H(G), 428H(G), 444H(G), 454H(G), 458H(G),

468H(G), 484H(G), 488H, ELE385H(G)

NOTE: Students should arrange their programme so as to complete the requirements for the Major in Computer Science by the end of the third year.

Crime and Deviance (B.A.)

Faculty Coordinator: Departmental Advisor
(Sociology)

This approved area of study is designed to provide a broad foundation for students who may have a vocational, academic and/or civic interest in issues of crime and its control.

This might include:

- students who at a later stage may seek careers in the criminal justice system (e.g., police, probation and prison work);
- students who at a later stage may wish to pursue more advanced work in areas related to, for example, criminology or social work;
- students wanting to know more about the topics of the sociology of crime, particularly as these become issues of public policy.

A minimum of 7 full course equivalents in a 15 credit degree programme

5 full course equivalents are required (including 2 prerequisite full course equivalents).

SOC101Y/216Y, PSY100Y, SOC212Y, 306Y, 303H, PSY324H/SOC329H

Optional Courses: Two full course equivalents to be selected from the following: PHL271H, 281H, 370H, PSY220Y, 230H, 260H, 340Y, SOC213Y, 301Y, 324Y, 346Y

Drama (B.A.)

Major programme M21485

6 courses are required in a programme of at least 15 courses

These courses must be chosen from the following groups:

Theatre History and Theory
DRM120Y, 390Y

Theatre Practice
DRM200Y, 300Y, 390Y

Dramatic Literature
CLA300Y

ENG220Y(formerly 212Y), 222Y, 223H, 224H, 330H, 332Y, 334H, 338Y; 390Y, 404H, 405H, 420H, 421H, 490Y may be included when their subject is drama, with permission of Faculty Advisor.

FRE254H, 358Y

GER421Y, ITA272H, SPA343H, 348Y

Minor Programme

3 courses are required in a programme of at least 15 courses

DRM120Y, 200Y

One course in Dramatic Literature

Earth Resources (B.Sc.)

Faculty Coordinators: Professor S. Luk
(Geography)

Professor G.W. Pearce (Geological Sciences)

This programme is designed:

- to acquaint students with problems related to the physical resources of the earth and to the use of these resources by man; and
- to develop pertinent skills used in government resource agencies, consulting firms, and resource industries.

Specialist Programme S01125

A minimum of 12 courses are required in a 20 credit programme including:

- all of: CHM135Y, GSC120H, 121H, GGR117Y, MAT132Y, PHY132Y/140Y, GSC219H, 200H/222H, 221H
- 1 ½ full course equivalents from: GGR201H, 205H, 206H, 207H, 214H
- 1 ½ full course equivalents from: GSC270H, 320H, 322H, 375H, 345H/376H
- 1 ½ full course equivalents from: GGR307H, 312H, 313H, 316H, 374H, 376H
- 1 full course equivalent from: GGR233Y, 333H, 334H

Supplementary Course Sequence: It is strongly recommended that students also take some courses from one of the following groups:

- Biophysical Resources*
BIO101Y, 204H, 205H, 330Y, 332Y
- Resource Assessment Techniques*
GGR202H, 212H, 276H, 280H, 377H
- Resource Utilization and Development*
ECO100Y, 200Y, 208Y, 220Y, 324Y

- (4) *Land Information Systems*
CSC108H, MAT214H, 233H, SUR230Y, 337H,
361H, 362H, 392H

Major Programme M01125

A minimum of 7 courses are required in a 15 credit programme, including:

- (a) all of: GSC120H, 121H, 219H, 200H/222H, GGR117Y
- (b) 1 ½ full course equivalents from: GGR201H, 205H, 206H, 207H, 214H
- (c) 1 ½ full course equivalents from: GGR307H, 312H, 313H, 316H, 374H, 376H
- (d) 1 full course equivalent from: GGR233Y, 333H, 334H

Supplementary Course Sequence: It is strongly recommended that students also take some courses from one of the following groups:

- (1) *Biophysical Resources*
- (2) *Resource Assessment Techniques*
- (3) *Resource Utilization and Development*
(See Specialization Requirements above)
- (4) *Geological Resources*
CHM135Y, MAT132Y, GSC221H, 270H, 320H,
375H, 345H/376H

Economics (B.A., B.COM.)

Enrolment in Economics programmes is based on grades in ECO100Y and, in some cases, MAT132Y. There is no grade point average requirement and no restriction on the number of students entering any one programme. Departmental permission is required.

**Specialist programmes
(Limited Enrolment)**

NOTE: Programme (a) leads to the B.A. degree. Programme (b) can *only* be taken conjointly with a specialist programme in Commerce and Finance (see p. 48), and thus leads to a B.Com. degree. Enrolment in Programme (b) is thus open *only* to those who have been admitted to the B.Com. degree programme.

(a) *Economics Specialist programme S14785*

NOTE: Enrolment in this programme is limited to students with 70% in ECO100Y and (60% in MAT132Y or 55% in MAT138Y). 13 courses are required in a programme of 20 courses

First Year: ECO100Y, MAT132Y/138Y

Higher Years:

- 1. ECO206Y, 208Y, 227Y/STA262Y, ECO322Y, 325H, 326H, 327Y
- 2. ECO203Y/221Y/222Y
- 3. Four additional ECO courses, including three 300 series courses and one 400 series course

4. Students are strongly advised to take ENG103Y before completing 15 courses

Major programme M14785

NOTE: Enrolment in this programme is limited to students who have 60% in ECO100Y *or* who have passed ECO100Y and have a cumulative GPA of 2.50.

7 courses are required in a programme of 15 courses

ECO100Y, 200Y/206Y, 202Y/208Y, 220Y/227Y/
STA242Y/262Y, MAT132Y/138Y

Two other ECO courses, at least one of which is at the 300 level

Minor programme R14785

Note: Enrolment in this programme is limited to students who have 60% in ECO100Y *or* who have passed ECO 100Y and have a cumulative GPA of 2.50.

3 courses are required
ECO100Y

Two other ECO courses

(b) *Specialist Programme: Economics (Commerce and Finance) S01375*

This programme can only be taken conjointly with the specialist programme in Commerce and Finance (see p. 48), and thus leads to a B.Com. degree. Students must be accepted in the Commerce and Finance (B.Com.) Programme to register in the Economics (Commerce and Finance) programme.

NOTE: Enrolment in this programme is limited as follows: 70% in ECO100Y *and* (60% in MAT132Y or 55% in MAT138Y) *and* 63% in COM120H *and* a minimum cumulative GPA.

16 courses in a programme of 23 courses

First Year: ECO100Y, COM120H, 121H/CSC104H,
MAT132Y/138Y

Higher Years:

- 1. ECO206Y, 208Y, 227Y/STA262Y, COM220Y
- 2. COM337Y, COM222H if COM121H is not taken, ECO325H, 326H/COM310Y, ECO327Y
- 3. ECO203Y/221Y/222Y/322Y
- 4. Five additional courses from the following list, including at least one 400 level course and one ECO course.
 - a) Any 300 level or 400 level ECO course or courses.
 - b) COM310Y, 330H, 350Y, 362H, 363H, 390Y, 423Y, 431H, 438H, 439H, 453H, 470Y, 490H

Major programme: Economics (Commerce and Finance)

Completion of the Commerce and Finance (B.Com.) Specialist Programme by itself fulfills the requirements of the Economics major programme.

Economics and Political Science (B.A.)

Combined Specialist programme S07515 (Limited Enrolment)

Note: Enrolment in this programme is limited to students with 60% in ECO100Y or who have passed ECO100Y and have a cumulative GPA of at least 2.50.

8 Economics (and Mathematics) courses and 7 Political Science courses are required in a programme of at least 20 courses

The following courses must be included in the programme:

Economics

ECO100Y, 200Y/206Y, 202Y/208Y, 203Y/221Y/222Y, 220Y/227Y/STA242Y/262Y, ECO322Y, MAT132Y/138Y

One additional course in Economics

Political Science

7 courses in Political Science, at least 5 from the 200 or higher series

One full course in Canadian Government
POL200Y, 309Y

One full course equivalent from two of the following four fields:

- Comparative Politics (Industrial Countries)
- Comparative Politics (Developing Countries)
- International Relations
- Public Policy and Public Administration

Two additional full course equivalents in Political Science

English (B.A.)

Specialist programme S16455

At least 10 and not more than 15 courses in a 20 course degree programme, fulfilling the following requirements; only one 100-Series course may be counted.

1. ENG102Y (It is highly recommended that this course be taken in first year.)
2. ENG202Y (It is recommended that this course be taken in first year.)
3. At least three pre-1800 courses from Group A. (See below.)
4. At least one Canadian Literature course from Group B. (See below.)
5. Any four additional ENG courses.
6. At least four of the ten courses must be from the 300+ series.

Group A: ENG220Y, 240Y, 241Y, 243Y, 244Y, 300Y, 302Y, 304Y, 306Y, 322Y, 330H, 332Y, 334H, 400Y, 401Y, 405H, 406H

Group B: ENG215H, 216Y, 223H, 252Y, 350H, 354Y, 356H, 430H, 431H

Major programme M16455

At least 7 ENG courses fulfilling the following requirements; no more than one 100-series course may be counted.

1. ENG102Y (It is highly recommended that this course be taken in first year.)
2. ENG202Y (It is recommended that this course be taken in first year.)
3. At least three pre-1800 courses from Group A. (See above.)
4. At least one Canadian Literature course from Group B. (See above.)
5. Any three additional ENG courses.
6. At least two of the seven courses must be from the 300+ series.

Minor Programme R16455

Any 3 ENG Courses

NOTE: (Students who began prior to 1988-89 may follow either this programme or the programme in force at the time of their first registration. (Consult the Departmental Brochure for arrangements about counselling.)

English and History (B.A.)

Combined Specialist Programme S04775

14 full course equivalents in a programme of at least 20 courses

At least 6 and not more than 8 full course equivalents in English, including ENG102Y; 202Y; at least one from group A (pre-1800) of the English Specialist programme; and any other 3 ENG courses, but only one 100 series ENG course.

Students enrolled before the 1988-89 session may choose to complete their programmes under the English Department regulations existing when they enrolled and observing the requirements outlined in the 1987-88 calendar. At least 6 and not more than 8 courses in History, in at least two areas and including:

- a) one course before 1815
- b) two 300/400 level courses in British History
- c) two courses which correspond in area and period or in theme to two of the period or national literature courses in English

One course will be a senior essay (either ENG490Y or HIS 497Y) in the Fourth Year of study on a topic chosen by the student and written under the supervision of the Department of English or History. Students in the programme are required to confirm their programme annually with the Faculty Advisor during the registration period.

Environmental Science (B.Sc.)

Faculty Coordinators: Professor D.S. Munro (Geography)

Professor J. Svoboda (Biology)

This cooperative programme between Biology and Geography is designed to prepare students for employment or advanced study in environmental assessment and management by:

- 1) familiarizing students with the structure and function of various types of natural and managed environments.
- 2) educating students about environmental problems and the conceptual and practical skills useful in developing and implementing possible solutions.

Specialist Programme S10615

12 ½ courses are required in a 20 credit programme

- 1) As basic preparation in the sciences: BIO101Y/201Y, GGR117Y, CHM135Y/150Y, MAT132Y, PHY120Y/132Y/140Y
- 2) As basic preparation in environmental studies: JBG230Y, BIO205H and 203H/204H/206H
- 3) One full course equivalent from the following group in physical geography: GGR201H, 205H, 206H, 214H
- 4) One full course equivalent in statistics: BIO360H, 361H/GGR202H, 212H
- 5) One half course emphasizing field methods from: BIO300H, 301H, 302H, 316H, GGR379H
- 6) One course in advanced ecology from: BIO330Y, 332Y, 417Y, 430Y
- 7) One full course equivalent in advanced physical geography from: GGR302H, 304H, 307H, 312H, 316H, 374H, 376H, 377H
- 8) One full course in independent research: JBG491Y

To meet the current graduation requirements one course offered by the Division of Humanities is also required, as well as one non-science course from the Division of Social Sciences.

In the remaining 5 ½ options available in a 20 credit programme, students are urged to include courses not yet selected from groups 3, 5, 6 and 7 above, or from the following lists.

- 1) Related Biology courses: BIO235Y, 310H, 311H, 312H, 318Y, 319H, 334H, 355H, 370Y, 433H, 442H, 456H, JBP359Y
- 2) Cognate Sciences: CHM211H, MAT234Y, PHY211H, 222H
- 3) Techniques of Analyses and Assessment: GGR207H, 233Y, 276H, 280H, 300H, 335H, 381H

Major Programme M10615

7 courses are required in a 15 credit programme

- 1) As basic preparation in Geography and Biology: BIO101Y/201Y, GGR117Y
- 2) As basic preparation in environmental studies: JBG230Y, BIO205H and 203H/204H/206H
- 3) Two half courses from the following group in physical geography: GGR201H, 205H, 206H, 214H
- 4) Two half courses in statistics: BIO360H, 361H/GGR202H, 212H
- 5) One half course emphasizing field methods from among: BIO300H, 301H, 302H, 316H
- 6) One half course in advanced physical geography from among: GGR304H, 307H, 312H, 313H, 316H, 374H, 376H, 377H, 379H

To meet current graduation requirements one course offered by the Division of Humanities is also required, as well as one non-science course from the Division of Social Sciences.

Of the remaining 6 courses in a 15 credit programme, students are urged to include courses not yet selected from groups 3, 4, 5, and 6 above, or from the lists following the description of the specialist programme.

Exceptionality in Human Learning (B.A./B.Sc.)

Faculty Coordinator: Professor S. Trehub

This approved area of study is designed to provide a broad foundation for students who may have a vocational, academic, and/or civic interest in issues concerning exceptional children and adults, both the gifted and the handicapped. The Faculty of Education at the University recommends this programme for prospective applicants.

Interested students might include:

- (a) those who at a later stage may wish to pursue more advanced work in special education, mental or physical rehabilitation programmes, group home management, adult retraining, etc. study in areas related to hearing impairment, visual impairment, mental retardation, physical disability, or related fields.
- (b) those wanting to know more about the psychology, sociology and biology of exceptional individuals, particularly as these become issues of public policy.

Specialist Programme S14405

(Limited enrolment)

13 full course equivalents in a 20 credit degree programme

8 ½ courses are required:

PSY100Y, 210Y, 340Y/(or 330H and 331H), 341H, 342Y

For B.A. specialists, SOC101Y and 3 other Sociology courses

For B.Sc. specialists, BIO101Y/201Y, 203H, 204H and 2 other Biology courses (1 may be CHM) 4 ½ additional full course equivalents to be selected from the following (no more than two from any one discipline:

ANT100Y/203Y; BIO101Y/201Y/203H/204H/206H/304H/310H/314H/315H/ 318Y/352H/354H/356H/360H/361H/375H/424H/440Y/442H; CHM240Y/341H/347H/360Y; LIN130Y; PHL244H/255H/271H/272H/274H/277Y/281H; PSY201H/202H/270Y/314H/315H/316H/319H/330H/331H/340Y/373H/374H/376H

Major Programme M14405

6 full courses are required in a 15 credit programme. PSY100Y, 210Y, SOC101Y/BIO101Y/201Y

One additional full course equivalent in Psychology to be chosen from PSY315H, 330H, 331H, 340H, 341H

For B.A. majors, 2 additional full courses in Sociology

For B.Sc. majors, 2 additional full courses in Biology from those listed in the Specialist Programme above.

Students may wish to supplement this programme by choosing additional courses from among those required or suggested for the Specialist Programme.

ANT100Y/203Y

BIO101Y/201Y/203H/204H/206H/304H/310H/314H/315H/318Y/352H/354H/356H/360H/361H/375H/424H/440Y/442H

CHM240Y/341H/347H/360Y

LIN130Y

PHL244H/255H/271H/272H/274H/277Y/281H

PSY201H/202H/270Y/314H/315H/316H/319H/330H/331H/340Y/373H/374H/376H

Major Programme 14405

6 full courses are required in a 15 credit programme. PSY100Y, 210Y, SOC101Y/BIO101Y/BIO201Y

One additional full course equivalent in Psychology to be chosen from PSY315H, 330H, 331H, 340H, 341H

For B.A. majors, 2 additional full courses in Sociology

For B.Sc. majors, 2 additional full courses in Biology from those listed in the Specialist Programme above.

Students may wish to supplement this programme by choosing additional courses from among those required or suggested for the Specialist Programme.

Fine Art (History of Art) (B.A.)

Specialist programme S09085

11 courses are required in a programme of at least 20 courses.

At least 9 Art History courses (including core surveys FAH101Y, 102Y, 200Y, 210Y, plus at least 3 full courses at the 300 or 400 level) and two courses in French, German or Italian. No more than a total of 13 FAH and FAS full courses may be taken.

In designing a curriculum students are advised to note the prerequisites and corequisites of many FAH courses. The following progression of courses is strongly recommended:

First year: FAH101Y, 102Y, one language course

Second year: FAH200Y, other FAH200/300 level courses, one language course

Third year: FAH210Y, 211H and further courses chosen preferably from the FAH300 and 400 levels

Fourth year: Further FAH courses chosen preferably from the FAH 300 and 400 levels

NOTE:

1. FAH211H, 338H, and 402H are offered on the St. George Campus.
2. Specialists or majors in art history or art and art history are strongly urged to include in their programmes FAH101Y/102Y, 200Y and 210Y in this sequence.
3. Specialists in art history are strongly urged to take FAH211H given only on the St. George Campus.
4. Courses in other departments, especially East-Asian Studies, Near Eastern Studies, Middle East and Islamic Studies, may be substituted for up to two full FAH courses with permission of the Undergraduate Secretary.
5. It is strongly recommended that students acquire a reading knowledge of at least one of French, German, or Italian by the end of second year.
6. With the permission of the Undergraduate Secretary, students may include up to the equivalent of two full courses from FAH202Y, 256H, 258H, 265H.
7. Though not required, one or more studio courses are recommended. FAS330Y *Past and Present Techniques* is open to History of Art Majors and Specialists; see Course Descriptions Section 8.
8. Course selections beyond the level of the core surveys should be made from at least two of the periods designated as Ancient, Mediaeval, Renaissance-Baroque, and Modern.
9. Students who wish to complete their programmes at the St. George Campus must apply to the Department of Fine Art, where each application will be judged on an individual basis.

Major programme M09085

6 courses are required in a programme of at least 15 courses.

6 FAH courses of which at least 3 must be selected from the core surveys (see Specialist programme) and an additional 2 from the FAH300 or 400 level courses

Up to one full course may be taken in other departments (see Specialist Note 1). No more than a combination of 10 FAH and FAS full courses may be taken of which no more than a total of 8 may be FAH

Minor programme R09085

3 courses from the core surveys

Art and Art History (B.A.)

Specialist programme S07145

At least 7 full course equivalent FAS courses and 4 full course equivalent FAH courses are required in a programme of at least 20 courses. Three of the FAH courses must be from the core surveys (see Fine Art History – Specialist programme). The following 8 half courses comprise the FAS requirements:

FAS143H, 145H, 146H, 147H

FAS232H*, 245H, 246H, 248H

3 full courses (or their equivalents) from the 300 or 400 series must include 1 full course from the 400 level

NOTES:

1. In order to be eligible for enrolment in a FAS course, students must apply and register in person at Sheridan College, Oakville Campus.
2. Enrolment is limited in all studio courses and balloting is mandatory and should be completed on forms available from the Fine Art Office, Erindale or Registrar's Office, Sheridan. Deadline: August 19.
3. *FAS 232H is open to first year students.

Major programme M07145

At least 4 full course equivalent FAS courses and at least 3 full course equivalent FAH courses are required in a programme of at least 15 courses. The 3 FAH courses must be from the core surveys (see Fine Art History – Specialist programme).

The following 8 half courses comprise the FAS requirements.

FAS143H, 145H, 146H, 147H

FAS232H*, 245H, 246H, 248H

NOTES:

1. In order to be eligible for enrolment in a FAS course, students must apply and register in person at Sheridan College, Oakville Campus.
2. Enrolment is limited in all studio courses and balloting is mandatory and should be completed on forms available from the Fine Art Office, Erin-

dale or Registrar's Office, Sheridan. Deadline: August 19.

3. *FAS 232H is open to first year students.

French Language and Literature (B.A.)

Students who began their programme earlier than September 1985 may follow either this programme or that in the 1984-85 Calendar. See departmental brochure for full details.

Specialist Programme S12955

10 courses, including at least 4 300+ series courses and at least one 400 series course

First year: FRE150Y/161Y/171Y (no more than 1 may count towards specialization)

Higher Years:

1. FRE240Y

2. FRE271Y, FRE371Y/(FRE380H + FRE381H).

Students with a sufficiently high mark in FRE 271Y (see departmental brochure) may substitute for FRE371Y/FRE380H/FRE381H an additional course or half course from Groups B, C, or D.

3. Additional courses to a total of 10 from Groups A, B, C, D, below, including at least 1 course from each group; 4 courses must be in literature, 2 in linguistics.

NOTE: Only 3 of FRE161Y, 171Y, 271Y, 371Y/(380H + 381H) and 2 Special Seminars or approved non-FRE courses may be included. The following may NOT be included: FRE101Y, 121Y, 151Y, 177H, 261Y, 361Y, 461Y.

Major programme M12955

7 courses, including at least 1 300+ series course
First year: FRE150Y/161Y/171Y (No more than 1 may count towards a major)

Higher years:

1. FRE240Y, 271Y

2. At least 1 course from Group A (below)

3. At least 1 course from each of Groups B, C, D (below)

See also NOTE in Specialist programme

French Language and Linguistics (B.A.)

Major programme M14895

7 courses, including at least 1 300+ series course
First year: FRE150Y/161Y/171Y (No more than 1 may count towards a major)

Higher years:

1. FRE271Y

2. At least 4 courses from Group A (below)

3. At least 1 course from Groups B, C, D (below) or FRE240Y

NOTE: Only 3 of FRE161Y, 171Y, 271Y, 371Y, (380H + 381H) and 2 Special Seminars or approved non-FRE courses may be included. Only 1 of the following may be counted as a linguistics course: FRE470Y, 475Y, 480Y, 481Y. The following

courses may not be included: FRE101Y, 121Y, 151Y, 177H, 261Y, 361Y, 461Y.

Group A (French Linguistics): FRE272Y, 273Y, 375Y, 376H, 378H, 475Y, or Independent Study or other approved course in the area
NOTE: 1 translation course, FRE475Y, may count in the French Language and Linguistics programmes.

Group B (Literature until 1800): FRE220Y, 322Y, or Independent Study or other approved course in the area

Group C (Literature after 1800): FRE224Y, 225H, 258H, 358Y, 364Y, 426Y, or Independent Study or other approved course in the area

Group D (Québec Literature): FRE210Y, 310Y, or Independent Study or other approved course in the area

French Studies R21565

Minor programme:

Any 3 full-course equivalents in FRE

French and Italian (B.A.)

Combined Specialist S08155

14 courses are required in a programme of at least 20 courses.

French

7 courses, including at least 3 300+ series courses

First year: FRE150Y/161Y/171Y. (No more than 1 may count towards specialization.) Higher years:

1. FRE240Y
2. FRE271Y, FRE371Y/FRE380H/381H. Students completing FRE271Y with a sufficiently high mark (see departmental brochure for details) may substitute for FRE371Y/380H/381H an additional course or half course from Groups B, C, or D
3. 1 course from Group A of the FRENCH programme
4. 2 courses from two of Groups B, C, D of the FRENCH programme

Italian

7 full course equivalents are required.

1. 3 courses from ITA100Y/115Y, ITA200Y/210Y, 350Y, 355Y, 221Y, 230Y, 235Y
2. ITA321Y
3. One course from ITA324Y, ITA390Y, ITA436Y
4. 2 other ITA full course equivalents except courses taught in English

Geography (B.A.)

Specialist programme S16665

11 courses are required in a programme of at least 20 full courses, as follows:

- a) all of GGR117Y, 217Y, 218Y, 219H, 317Y, 318Y, 319H, 417Y, 418Y
- b) 2 full course equivalents from the GGR "non-science" offerings; and
- c) MAT105Y/(if student has a Grade 13 mathematics course or equivalent) one full course or equivalent, from BIO, CHM, GSC, MAT or PHY.

Major programme M16665

7 courses are required in a programme of at least 15 full courses, as follows:

- a) all of GGR117Y, 217Y, 218Y, 219H, 317Y, 318Y
- b) ½ course from the GGR "non-science" offerings; and
- c) MAT105Y/(if student has a Grade 13 mathematics course or equivalent) one full course or equivalent, from BIO, CHM, GSC, MAT or PHY.

Geography (B.Sc.)

Specialist Programme S16665

13 courses are required in a programme of at least 20 full courses, as follows:

- a) all of GGR117Y, 217Y, 218Y, 219H, 317Y, 318Y, 319H, 417Y, 418Y
- b) 2 full course equivalents from the list of GGR science courses
- c) two full course equivalents from BIO, CHM, GSC, PHY; and
- d) MAT105Y/132Y.

Major Programme M16665

7 courses are required in a programme of at least 15 full courses, as follows:

- a) all of GGR 117Y, 217Y, 218Y, 219H, 317Y, 318Y;
- b) ½ course from the list of GGR science courses; and
- c) MAT105Y/132Y.

Old programmes may be completed only by students who entered them in 1987-88 or earlier.
For Programme Requirements, please refer to Calendar 1987-88 and earlier years.

Geology (B.Sc.)

Consult Undergraduate Secretary in Department of Geological Sciences (formerly Earth and Planetary Science)

Specialist Programme S05095

15 full course equivalents are required in a programme of at least 20 full course equivalents
First year: CHM135Y/150Y; MAT132Y/138Y; PHY120Y/132Y/140Y; 1 full course equivalent from GSC110H/120H/121H.

Basic Science requirements (to be taken as early as practical during the student's programme, typically in second year):

1 ½ full course equivalents from:
 BIO101Y/201Y/202H/203H/204H/205H/206H;
 CHM211H, 221H, 231H; PHY218H, 219H, 224H,
 240Y; CSC (excluding CSC104H); MAT108H,
 214H, 228H, 233H, 238Y; STA202H, 212H, 242Y,
 262Y.
 Second year: GSC219H, 220H, 221H, 222H, 230H,
 270H.
 Third Year: GSC320H, 321H, 322H, 332H, 335H,
 375H, 376H
 Third/fourth year: Three 300/400 level full course
 equivalents in Geology other than those listed
 above, at least one of which must be at the 400
 level. Up to one full course equivalent from the
 following may be substituted for a 300/400 level
 GSC/GLG course: GGR301H, 302H, 316H, 376H,
 PHY324H(G), 338H(G), 421H(G), 422H(G),
 424H(G), SUR337H, ZOO464Y(G)

Recommendations for detailed course sequences,
 aimed toward specific fields within the Earth
 Sciences, can be obtained from the department.
 Examples include Invertebrate Paleontology,
 Stratigraphy, Petroleum Geology, Geochemistry,
 Mineral Exploration, Global and Planetary Geology,
 and Applied Geophysics. Students are advised to
 contact the secretary in the Department of Geo-
 logical Sciences.

Major Programme M05095

7 full course equivalents are required in a pro-
 gramme of at least 15 full course equivalents:
 First year: MAT132Y/138Y; 1 full course equivalent
 from GSC110H/120H/121H.
 Basic Science requirement: ½ course from BIO,
 CHM, CSC, MAT, PHY, STA.
 Second year: GSC219H, 220H, 221H, 222H, 270H.
 Third year: 2 full course equivalents from GSC/
 GLG 300 level.

Geology and Chemistry (B.Sc.)

Consult Undergraduate Secretary in Department
 of Geological Sciences (formerly Earth and
 Planetary Sciences)

Specialist programme S05795

15 full course equivalents are required in a pro-
 gramme of at least 20 full course equivalents
 First year: CHM135Y/150Y; 1 full course equivalent
 from GSC110H/120H/121H; PHY140Y; MAT132Y/
 138Y.
 Second year: CHM211H, 221H, 231H, 240Y;
 GSC219H, 220H, 221H, 222H, 230H; MAT214H.
 Third/Fourth year: MAT233H; GSC320H, 321H;
 2 full course equivalents in CHM at the 300/400
 level, at least one of which must be at the 400 level;
 another 2 full course equivalents in GSC/GLG
 at the 300/400 level (see the Geology Specialist

programme for possible substitutes to GSC/
 GLG courses).

Geology and Physics (B.Sc.)

Consult Undergraduate Secretary in Department
 of Geological Sciences (formerly Earth and
 Planetary Science)

Specialist programme S16505

15 full course equivalents are required in a pro-
 gramme of at least 20 full course equivalents
 First year: CHM135Y/150Y, MAT132Y/138Y,
 PHY140Y; 1 full course equivalent from
 GSC110H/120H, 121H
 Second year: GSC219H, 220H, 222H; MAT214H,
 233H; PHY219H/224H, 240Y
 Third year: MAT311H; GSC322H, 332H; GSC335H/
 JGP334H; PHY333H, 334H
 Fourth year: GSC437H, 438H, 460H; 1 ½ full course
 equivalents in GSC/GLG at the 300/400 level; 1 full
 course equivalent in PHY at the 400 level.

German Language and Literature (B.A.)

Specialist programme S21355

10 courses are required in a programme of at least
 20 courses
 First year: GER202Y, 204Y
 Second year: GER210Y, 222Y, one of GER251Y/
 271Y/280Y/a course in German history
 Third and fourth years: GER326H; at least 2.5
 courses from GER310Y, 410Y, 412H, 413Y, 415H,
 416H, 490H; at least 3 courses, from GER321H,
 322H, 323H, 327H, 331H, 332H, 421Y, 422Y, 425Y,
 431H, 432H, 490H, to make a total of 10 courses

NOTE: Students without Grade 13 German wish-
 ing to specialize in German should arrange
 their programme in consultation with the
 Department.

Major programme M21355

7 courses are required in a programme of at least
 15 courses
 First Year: GER202Y, 204Y
 Second Year: GER210Y, 222Y
 Third Year: GER326H; at least one course from:
 GER310Y, 410Y, 412H, 413Y, 415H, 416H, 490H;
 at least 1 ½ courses from: GER321H, 322H,
 323H, 327H, 331H, 332H, 421Y, 422Y, 425Y, 431H,
 432H, 490H, to make a total of 7 courses

NOTE: Students without Grade 13 German wish-
 ing to major in German should arrange their
 programme in consultation with the Department.

Minor programme R21355

Three courses in German forming a coherent
 series, which must be approved by the Depart-
 ment before enrolment in the second year.

History (B.A.)

Specialist programme S06525

10 full courses or their equivalent are required in a programme of at least 20 courses. Of the 10, at least 5 must be at the 300/400 level. The 10 courses are to be chosen from a minimum of 3 areas of study (i.e., European, Russian and East European, Medieval, Canadian, American, Latin American, British, industry and labour history, social and cultural history).

Students wishing to substitute history courses from other departments for HIS courses should consult the Discipline Representative. Courses in ancient Greek and Roman History are offered, for example, by the Classics Department. In each of the 2 areas of study, a minimum of 2 300/400 level courses must be taken.

Of the 10 courses at least 2 must deal with periods preceding 1815. (Consult the Erindale History Handbook for listings of pre-1815 courses.) In addition each specialist student must take at least 2 400-series courses.

Major programme M06525

6 courses are required in a programme of at least 15 courses.

Of the 6, at least 2 must be at the 300/400 level.

The 6 courses must be chosen from at least 2 areas of study (i.e., British, Latin American, Canadian, American, European, Medieval, Russian and East European, industry and labour history, social and cultural history).

Of the 6 courses at least 1 must deal with a period preceding 1815.

(Consult the Erindale History Handbook for listings of pre-1815 courses.) Students who wish to substitute a History course from another department for a HIS course should consult the Discipline Representative. Courses in ancient Greek and Roman History are offered, for example, by the Classics Department.

Minor programme R06525

3 courses, at least 1 at the 300/400 level, chosen from no more than 2 areas of study.

History and English

See English & History

History and Political Science (B.A.)

Specialist programme S10455

Consult Associate Chairman, Department of History.

14 courses are required in a programme of at least 20 courses, 7 in each subject

History: 7 courses from at least two areas of study (e.g., British, Canadian), including at least two at 300/400 level

HIS262Y

At least one course before 1815 (Consult departmental handbook for listings of these). Two HIS courses must correspond in area and theme to two of the POL courses chosen

Political Science: 7 courses, of which at least five must be 200 or higher series and one 400 series POL100Y/102Y, 200Y

One course from each of two of the following fields: Comparative Politics (Developing), Comparative Politics (Industrial), International Relations, Political Behaviour, Public Policy and Public Administration

Three additional POL courses

Italian (B.A.)

See also Cinema Studies

Specialist programme S25245

10 full courses are required in a programme of at least 20 courses

ITA321Y, 436Y (or equivalent)/324Y

2 full courses or equivalent from ITA100Y/110Y, 200Y/210Y, 350Y (Formerly 340Y), 355Y (Formerly 341Y), 450Y

1 full course or equivalent from ITA324Y, 326H, 427H

1 full course or equivalent from ITA325H, 390Y, 395H

4 other full course equivalents in ITA, including those listed above, but only 1 film course (ITA240Y or 340Y) may be chosen.

Major programme M25245

7 courses are required in a programme of at least 15 courses

ITA321Y

2 courses from ITA100Y/110Y, 200Y/210Y, 350Y, 355Y, 450Y

4 other full course equivalents in ITA, including those listed above, but only 1 film course (ITA240Y or 340Y) may be chosen.

Minor programme R25245

3 ITA courses are required in a programme of at least 15 courses

Possible combinations:

Three courses or equivalent from the following, all given in English: ITA240Y/(270H and 272H)/340Y or

Three consecutive language courses or

Three courses or equivalent selected in consultation with and approved by the Italian Department

NOTE: Students intending to pursue graduate studies in Italian at the School of Graduate Studies in Toronto should take three full courses or equivalent covering three of the main periods of Italian literature (i.e., Middle Ages, the Renais-

sance, the 17th and 18th centuries, the modern period) and must obtain an overall average of at least 75% in their last two years of study.

Italian and French

See French & Italian Combined specialist

Latin American Studies (B.A.)

Faculty Coordinator: Professor D.L. Raby (History)

Major Programme M05525

A minimum of 7 full course equivalents in a 15 credit degree programme
7 full course equivalents (for students with Grade 13 Spanish)
8 full course equivalents (without Grade 13 Spanish)
SPA220Y*, 280Y, 320Y, HIS290Y, 484Y, ANT210Y, INE390Y

Supplementary courses:

The programme may be supplemented with one or more of the following courses: HIS335H, 391H, 492Y, SPA366H, 382H, 385H

***NOTE:** Native speakers of Spanish are required to substitute the equivalent of one full course at the 300 level in Spanish American literature for SPA220Y

Logic (B.A.)

Major Programme M 17365

6 full course equivalents are required in a 15 course programme

- a) CSC 148H, 364H (For students in the programme, the prerequisite for CSC364H will be satisfied by the combination of CSC148H, MAT228H and PHL344H)
- b) MAT 132Y/138Y, 228H, 398H
- c) PHL245H, 344H, 345H
- d) Three of PHL246H, 346H, 347H, 351H, 356H

Mathematical Sciences (B.Sc.)

Specialist programme S25115

10 courses are required in a programme of at least 20 courses

CSC148H, 158H, MAT104H, 108H, 138Y
MAT251Y, CSC238H, MAT228H, 238Y, STA242Y
MAT334H, 349H

one of: CSC(228H, 258H)/MAT(338H, one other half-course at the 300/400 level)/MAT351Y/
(MAT311H, APM336H(G)/366H(G)/ 371H(G))/
STA(302H, 402H)/(312H, 412H)

Plus one full course equivalent in APM, CSC, MAT (excluding, MAT105Y) or STA

Major programme M25115

6 courses are required in a programme of at least 15 courses

MAT108H, 138Y, 251Y, 228H, 238Y, 334H, 349H,
and one 300/400 series full course in APM,
CSC, MAT, or STA

Minor programme R25115

MAT108H, 132Y/138Y, one and one-half other
courses in MAT (excluding MAT105Y)
MAT228H may be substituted for MAT108H

Native Studies (B.A.)

Faculty Coordinators: Professor R.M. Vanderburgh (Anthropology)

Professor W.B. White (History)

Issues involving Native peoples have become not only of contemporary concern, but have revived interest in the cultures and events of the past. This programme examines the cultures of the past and present, as well as the history and theoretical framework of the interaction of Native and colonizing peoples. The programme is interdisciplinary, combining the courses and approaches of Anthropology, History, Sociology, and Geography. It complements programmes with interests in North American studies, ethnic/racial history, and environmental studies. Students may pursue special interests through an independent study course.

Major Programme M01595

A minimum of 7 full course equivalents in a 15 credit degree programme

Required courses: ANT241Y, SOC330H, HIS417Y,
ANT304H/319H

Optional Courses:

4 full course equivalents to be selected from the following: ANT200Y/201Y/204Y/228H/311H/317H/
398Y/GGR263H/364H/HIS391H/412H/497Y/
SOC304Y/SPA280Y

Philosophy (B.A.)

Specialist programme S02315

9 full courses (or the equivalent) in Philosophy, at least 4 of them above the 200 level, are required in a programme of at least 20 courses. The programme must include the following courses:

- 1. PHL200Y, 210Y, 307H
- 2. PHL245H, 345H
- 3. PHL277Y

In addition, it is strongly recommended that students begin their study of Philosophy with a 100 series course.

A student's programme must be approved by the staff Specialist Coordinator. This programme will normally be established by the end of the student's second year and confirmed at registration in subsequent years.

Major programme M02315

7 full courses (or the equivalent) in Philosophy, at least 2 of them above the 200 level, are required in a programme of at least 15 courses. The programme must include the following courses:

1. PHL200Y, 210Y
2. PHL 245H
3. PHL277Y

In addition, it is strongly recommended that students begin their study of Philosophy with a 100 series course.

A student's programme must be approved by the staff Specialist coordinator. This programme will normally be established by the end of the Student's second year and confirmed at registration in subsequent years.

Minor programme R02315

3 full courses (or the equivalent) in Philosophy are required in a programme of at least 15 courses

Old programmes may be completed only by students who enrolled in them in 1987-88 or earlier. For Programme Requirements, please refer to Calendar 1987-88 and earlier years.

Physical Chemistry

See Chemistry (Physical)

Physics (B.Sc.)

Specialist programme S19445

14 courses required in a programme of at least 20 courses

First year: PHY140Y, MAT138Y, MAT228H

Second year: PHY224H, 240Y, 257H, 258H, MAT238Y, 214H/251Y

Third year: PHY325Y/326H, 351H(G), 352H(G), 354H(G), 355H(G), 356H(G), MAT311H/351Y/346H(G), MAT334H

Fourth year: Three and one half 400 series PHY courses including at least three of the following (regardless of whether they are full or half-courses): PHY453H(G), 454H(G), 455H(G), 456H(G), 458H(G), 459Y(G), 468H(G).

Major programme M19445

7 courses required in a programme of at least 15 courses

First year: PHY132Y/140Y, MAT132Y/138Y

Second year: PHY(218H/221H + 219H)/240Y, PHY(257H + 258H)/(257H + 224H), MAT(214H + 233H)/238Y

Third year: PHY325Y/326H, and two or three of PHY332H, 333H, 334H, JGP334H, MAT311H
Recommended preparation: Students are advised to take PHY224H as an introduction to the advanced laboratory work in PHY325Y/ 326H

NOTE: Up to 7 courses taken at the St. George or Scarborough Campuses may be used to complete the requirements of the major programme in Physics. Interested students should consult with the faculty advisor in Physics.

Physics and Astronomy

See Astronomy and Physics

Physics and Geology

See Geology and Physics

Political Science (B.A.)

Specialist programme S20155

10 courses in Political Science, at least 8 from the 200 or higher series (of which at least two must be from the 400 series), are required in a programme of at least 20 courses

- a) POL200Y, 320Y
 - b) one course in Canadian Government
 - c) 1 full course (or the equivalent) from each of 3 of the following 4 fields:
 - Comparative Politics (Developing)
 - Comparative Politics (Industrial)
 - International Relations
 - Public Policy and Public Administration
 - d) 4 additional courses in Political Science
- Recommended: ECO100Y

Major programme M20155

7 courses in Political Science, at least 5 at the 200 or higher series are required in a programme of at least 15 courses

- a) POL200Y
- b) 1 course in Canadian Government
- c) 1 course from each of 2 of the 4 fields in Group c) of the Specialist programme
- d) 3 additional courses in Political Science

Minor Programme R20155

POL200Y and 2 other POL courses

Political Science and Economics

See Economics and Political Science

Political Science and History

See History and Political Science

Population and Society (B.A.)

Faculty Coordinator: Professor W. Kalbach (Sociology) This approved area of study is designed:

- (1) to introduce students to the place of population issues in modern society and
- (2) to develop in students basic demographic skills operable in academic, social service, planning and marketing agencies.

Major Programme M09255

A minimum of 7 full course equivalents in a 15 credit degree programme
5 full course equivalents (including prerequisites)
SOC101Y/216Y, SOC200Y/201Y/(GGR202H and 212H), SOC312Y, GGR255H, ANT305Y, SOC422H/423H

Optional Courses: Two full course equivalents to be selected from the following: ANT204Y, 334Y, 433H, HIS487Y, 248Y, GGR245Y, 357H, 381H, SOC210Y, 220Y, 205Y, 330H

Psychology (B.Sc.)

Specialist programme S11605

10 full courses in Psychology or their equivalent are required in a programme of at least 20 courses. All candidates for specialization must take PSY100Y and PSY201H. In addition, the remaining 8 ½ full courses must satisfy the distribution requirements listed below in section II.2 and III.1 and the laboratory requirement in section III.2. The student interested in specializing in Psychology should take into account distribution requirements as well as course prerequisites in planning the remaining 8 ½ courses. It should be noted that a single course may not be used to satisfy more than one distribution requirement or to satisfy the laboratory requirement and a distribution requirement.

- I. PSY100Y
- II.1) PSY201H
- 2) One course, full or half, from each category:
 - a) Biological Bases of Behaviour: PSY252H/290Y
 - b) Developmental and Social Processes: PSY210Y/220Y/230H
 - c) Cognitive Processes: PSY260H/270Y/280Y
- III.1) One course, full or half, from each category:
 - a) Biological Bases of Behaviour: PSY324H/354H/390H/393H/394H/399H/JBP359Y
 - b) Developmental and Social Processes: PSY311H/314H/315H/316H/319H/320H/324H/329H/331H/332H/340Y/341H/342Y/410H/420H/440H
 - c) Cognitive Processes: PSY314H/315H/331H/373H/374H/376H/379H/389H/393H/480H

- 2) One laboratory course or equivalent: PSY309H/319H/329H/379H/389H/399H/JBP359Y
- 3) Sufficient additional courses in Psychology to meet the requirement of 10 full courses in Psychology. At least 5 must be at a level of 300 or 400

Courses at 300 and 400 level which satisfy the requirements of III.1 and III.2 can count toward the requirement of at least 5 full courses at level 300 and 400. Psychology courses which meet the requirements in I and II can be counted toward the total requirement of 10 full courses in Psychology.

Requirements of II.1 and II.2 are recommended in second year. Candidates for the specialist programme should meet with their faculty advisor and have their programme approved.

NOTE: A student choosing PSY309H to satisfy the laboratory requirement in section III.2 must, in addition, take a limited enrolment course at the third or fourth year level (i.e., a seminar course, an independent study course, or the thesis course). A student choosing a laboratory course to satisfy section III.2 is not required to take an additional limited enrolment course.

Major programme M11605

6 full courses or the equivalent number of half courses are required for a major in Psychology. PSY100Y must be one of these 6 courses. Students must satisfy section II.2 of the specialist programme. Courses which satisfy section II.2 can be counted toward the requirement of 6 full courses. At least 2 of these 6 courses must be at level 300

Religious Studies (B.A.)

Specialist programme S01515

9 REL courses are required in a programme of at least 20 courses:

- a) REL220Y is a required course;
- b) 4 of the remaining 8 courses must be in the 300+ series, including at least 1 in the 400 series;
- c) of the 9 courses at least 4 must develop depth and focus of study in one area of specialization (see Note);
- d) course selection must ensure that more than one religious tradition is studied;
- e) 2 related courses offered by other departments may be permitted;
- f) a REL faculty advisor must be chosen to assist in designing a cohesive programme and to review annually the student's course selections.

Note: Typical areas of specialization include:
Religions of the West; Religions of the East; Scriptures; Philosophy of Religion.

For Erindale students, specialist and major programmes in Religion, Ethics and Society can be completed in their entirety on the Erindale campus. For details of these programmes, consult a REL faculty advisor or the departmental handbook.

Major programme M01515

5 REL courses are required in a programme of at least 15 courses:

- REL220Y is a required course;
- 4 approved courses, 2 of which must be in the 300+ series;
- there must be a concentration on one religious tradition or area of study;
- 1 related course in another discipline may be permitted;
- a departmental advisor must be chosen to assist in designing a cohesive programme and to review annually the student's course selections.

Minor programme

3 approved REL courses, among which REL220Y is strongly recommended

Sociology (B.A.)

Specialist programme S10135

9 SOC courses are required in a programme of at least 20 courses

SOC101Y/216Y, 200Y/201Y-*Strongly recommended* to be taken during the second year
SOC203Y/313Y

At least three SOC courses in one of the five subspecialty areas, with at least one of the three from the 300/400 series.

The subspecialty areas are:

Theory and Methods: SOC200Y, 201Y, 203Y, 313Y, 319Y, 321H, 322H, 410H, 411H, JGS340Y
Societies: SOC206Y, 220Y, 304Y, 312Y, 324Y, 422H, 423H

Communication/Interaction: SOC206Y, SOC202Y, 214Y, 215Y, 245Y, 280Y, 284Y, 308Y, 309Y, 315Y, 316Y, 329H, 331Y, 334Y, 420H, 421H
Inequality: SOC210Y, 212Y, 301Y, 303H, 306Y, 330H, 422H, 423H

Urban Life: SOC205Y, 206Y, 207Y, 305Y, 311Y, 325Y, 327Y, 328H, 329H, JGS340Y, SOC346Y, 422H, 423H

At least two SOC300/400 series courses, at least one of which must be a "Selected Topics" seminar from the 400 series.

Major programme M10135

6 SOC courses are required in a programme of at least 15 courses: SOC101Y/216Y, 200Y/201Y-*Strongly recommended* to be taken during the second year. SOC203Y/313Y. At least two SOC courses in one of the five subspecialty areas listed under the Specialist Programme.

Minor programme R10135

3 courses are required in a programme of at least 15 courses: SOC101Y/216Y and any 2 other SOC courses

NOTES: For SOC201Y, ECO220Y/GGR202H, 212H/STA202H, 212H/PSY201H, 202H/PSY201H, PSY309H will be regarded as equivalent. STA242Y is not regarded as equivalent. SOC101Y/216Y is a prerequisite for all other SOC courses. Instructors in subsequent courses will assume that the student has the background knowledge provided by the courses' prerequisites.

Spanish (B.A.)

Specialist Programme S06235

10 SPA courses are required in a programme of at least 20 courses

3 full courses or equivalent are required in addition to those listed below. Students must include SPA425H in their programme:

- For students beginning Spanish:
 - SPA100Y, 220Y, 320Y, 420Y
 - Two full SPA courses or equivalent in literature, linguistics, or civilization, one of which must be at the 300 or 400 level
 - SPA343H, 353H (SPA425H recommended)
- For matriculants:
 - SPA220Y, 320Y, 420Y
 - One full SPA course or equivalent at the 200 level
 - 1.5 SPA courses in literature at the 300/400 level
 - SPA343H, 353H, 425H
- For Native Speakers of Spanish:
 - SPA320Y, 420Y
 - SPA343H, 353H, 425H
 - 3.5 courses in literature, linguistics or civilization, at least 2 at the 300/400 level

Major programme M06235

6 SPA courses are required in a programme of at least 15 courses

- SPA100Y or equivalent
- SPA220Y or equivalent
- SPA320Y or equivalent
- One additional SPA full course or equivalent at the 300/400 level
- 2 additional SPA full courses or equivalent in language, literature or civilization

Minor programme R06235
Any three courses approved by the Discipline

Statistics, Applied (B.Sc.)

Specialist programme S15405
9 courses are required in a programme of at least 20 courses
MAT132Y/138Y, CSC148H/150H, (STA202H recommended)
STA262Y, MAT228H, (233H and 214H)/234Y/238Y, CSC158H
STA302H, 312H, 322H(G), 347H, 402H, 412H, 437H(G), 427H(G)/432H/442H(G)/447H(G)/457H(G); CSC228H/238H/258H/350H/351H

Major programme M15405
6 courses are required in a programme of at least 15 courses
MAT132Y/138Y, CSC148H/150H(STA202H recommended)
STA242Y/262Y, (MAT233H and 214H)/234Y/238Y, CSC158H, (MAT228H recommended)
(STA302H and STA402H)/(STA312H and STA412H)
Equivalent of 1 full course from STA302H, 312H, 322H(G), 347H, 402H, 412H, 432H, 427H(G), 437H(G), 442H(G), 457H(G)

Minor programme R15405
MAT132Y/138Y, STA242Y/262Y
1 full STA course from courses numbered 300 level or higher

Survey Science (B.Sc.)

Specialist programme S08775
(This is a new specialist programme that commenced in 1987-88).
14 courses in a programme of at least 20 courses
Recommended first year of study: MAT138Y/132Y, PHY140Y/132Y, GGR100Y (See Note 1), CSC104H/108H/148H, INE203H/205H, SUR201H, 202H
Recommended second year of study: ECO100Y, STA202H, SUR203H, SUR210H, 251H, 261H, 335H
Third year/fourth year: SUR311H, 361H, 320H, 405H, 458H, SUR455H/ 495H, and two full course equivalents selected from Survey Science subjects at the 300 and 400 levels

Major programme M08775
(This is a new major programme that commenced in 1987-88).
6.5 courses in a programme of at least 15 courses.
MAT138Y/132Y, PHY140Y/132Y, STA202H, SUR201H, 202H, 203H, SUR210H and any two full

course equivalents selected from Survey Science subjects, of which one must be at the 300 level

Note 1. For those electing to specialize in Geodetic Surveying, GSC120H and 121H are recommended as the alternative; see the Survey Science Faculty Advisor.

Specialist programme S08775
(Last entry to this programme was 1986-87)
13 ½ courses in a programme of at least 20 courses
MAT138Y/132Y, PHY140Y/132Y, GSC120H, 121H/ GGR100Y, CSC108H, ECO100Y, STA242Y, INE203H/205H (ENG100Y alternative for a full credit), SUR201H and 202H, (These courses should be taken in first year of study.)
SUR203H, 204H, 210H, 251H, 311H, 312H, 321H, 322H, 335H, 336H, 405H, 458H, 455H/495H

Major programme M08775
(Last entry to this programme was in 1986-87)
6.5 courses in a programme of at least 15 courses
MAT138Y/132Y, PHY140Y/132Y, STA242Y, SUR201H, 202H, 203H, 204H, 210H, and any two of SUR311H, 312H, 321H, 322H, 335H, 336H, subject to prerequisites

Urban Studies (B.A.)

Faculty Co-ordinator: Professor G.H.K. Gad (Geography)
The Urban Studies Programme is characterized by a unifying theme, not by any one perspective or methodology. The unifying theme for Urban Studies could be described as the study of the forces which give rise to towns and cities, the public policies directed at urban settlements, and the effects these particular forms of settlement have on society in a broad sense. The Urban Studies Programme enables the student to apply the viewpoints and methods of various disciplines to urban phenomena.
Students may graduate with a Specialist or Major programme in Urban Studies (for detailed requirements see below). Given careful programme planning it is possible to graduate with a double Specialist in Urban Studies and one of the traditional disciplines. The advantage of the double Specialist is the combination of an innovative, broad perspective on urban phenomena with a traditional methodological base. It is relatively easy to combine either an Urban Studies Specialist with a discipline Major programme, or the other way round, a discipline Specialist with an Urban Studies Major programme.

It is advisable to plan an Urban Studies Specialist Programme, and especially a double Specialist, as early as possible, at least by the end of first year. Many of the urban courses have prerequisites that must be met or recommended courses which aid in preparation. For example, students interested in Urban Economics (ECO333Y) should be aware that the course has four prerequisites (MAT132Y, ECO100Y, 200Y, 220Y/STA242Y). Students are strongly urged to consult the Urban Studies faculty coordinator for programme planning and advice about the variety of different course combinations.

Specialist programme S22075

10 full course equivalents are required in a programme of at least 20 courses. In selecting from categories 2 (Urban Courses) and 3 (Contributing Courses) above, students should cover at least *three* disciplines (i.e. ECO, FAH, GGR, POL, SOC) but choose no more than *five* from any one discipline.

1. *Methodology courses*: 1 full course equivalent of the following: ECO220Y, GGR202H/212H, SOC201Y, STA202H/212H/242Y

2. *Urban Courses*

At least 5 full course equivalents from the following: ECO333Y, FAH337H, 365H, GGR220Y, 245Y, 324H, 339H, 346H, 349Y, 357H, 441H, JGS340Y, POL308Y, SOC205Y, 328H, 422H, 423H

3. *Contributing Courses*

No more than 4 full course equivalents from the following: FAH211H, 256H, 337H, 365H, 370H, GGR255H, SOC304Y, 312Y, 330H

Note: Other courses not listed above may be included with the permission of the Urban Studies Programme Committee.

Major programme M22075

6 full course equivalents are required in a programme of at least 15 courses. In selecting from categories 2 (Urban Courses) and 3 (Contributing Courses) above, students should cover at least *three* disciplines with no more than *three* from any one discipline.

1. At least *four* full course equivalents from category 2 (Urban Courses) above

2. No more than *two* full course equivalents from category 3 (Contributing Courses) above

Chairperson of Committee: Professor R.O.

Matthews (978-6567)

Secretary of Committee: E.M. Ishibashi (978-6161)

Administrative Assistant: Ms. M. MacCormack (978-4060)

The History

The Faculty of Arts and Science initiated the Study Abroad Programme in the late 1920s to enable students in Modern History and Modern Languages to study at universities in Europe. The Study Elsewhere Programme, as it is now known, has grown to encompass most of the disciplines offered in the Faculty. Each year around forty students attend major universities in countries throughout the world, under the auspices of the Programme.

The Programme is designed to allow students to pursue their area of concentration at a university abroad for one academic year. The Programme also provides for study in Quebec. It is intended to enhance the university experience of each participant through learning from scholars at other institutions and through living in a different milieu.

The Programme

Candidates are expected to enrol in a programme equivalent to five University of Toronto courses: credit will be allowed in no more than five courses. Students may also distribute their courses over the Winter Session and during either the preceding or following summer.

Students may select University of Toronto courses which they take independently at the host university with general supervision from the faculty members of this University. Students must make arrangements for such supervision with each Departmental Adviser before leaving Toronto. The instructor of each course will evaluate the studies on the basis of term work and/or examinations. Students should obtain information on departmental policies regarding supervised courses and possible final examination.

Alternately, the staff of the host university may be involved in evaluating the student's performance. Students are then responsible for having the host university submit either an official transcript or the recommendation of his/her tutor(s) to the Committee on Study Elsewhere for consideration for transfer credit.

The Faculty now participates in a number of Exchange Programmes with universities outside of North America. A limited number of students accepted into the Study Elsewhere Programme may study with one of these Exchange Programmes.

It is assumed that participants will return to Toronto to continue their studies for a Four-Year degree.

Information

The Committee on Study Elsewhere has prepared an Information booklet which is available at the Office of the Faculty Registrar of the Faculty of Arts and Science, 100 St. George Street, Room 1006, University of Toronto, Toronto, Ontario, M5S 1A1 or at one of the Information Meetings. The names and telephone numbers of the Departmental Advisers for the Study Elsewhere Programme are available with the Information and Application booklet. The Departments of East Asian Studies, French, and Near Eastern Studies provide further information. This booklet also contains the names and telephone numbers of previous participants who are willing to provide information to interested students.

The Committee will hold Information Meetings for students intending to study elsewhere in 1989-90 and in 1990-91 as follows:

The Comprehensive Meeting: Monday, 17 October, 1988 at 4:15 p.m. Location to be announced in early September 1988.

Laval University Meeting: Monday, 24 October, 1988 at 4:15 p.m., (Department of French) at the International Student Centre, 33 St. George Street.

First Year Meeting: Monday, 27 February 1989 at 4:15 p.m., for students considering study elsewhere in their Third Year.

Eligibility

Arts and Science degree students who will have standing towards a degree in nine to eleven courses may apply. Such students should be pursuing a Specialist or a Major programme (i.e. at least three of the qualifying courses should be for the same Department). The applicants must achieve an overall grade point average of at least 2.5 in the last five courses completed by the spring of the year of application, as well as satisfy any departmental requirements over and above this Faculty minimum.

Application Procedures

In the Fall Term, students should decide where they wish to study and should seek advice from the Department(s) concerned about an appropriate programme of study which would satisfy the departmental requirements for specialist or major programmes. Students may obtain an information booklet with the application form in September from the Faculty Office. Applicants must obtain the approval of the Departmental Adviser(s) for Study Elsewhere and submit their completed

application forms to the Faculty Office by 15 February. The Faculty will announce the provisional decisions by the end of March, and notify students regarding final acceptance in June, after the results for the Winter Session have been determined.

Participants must pay a maintenance-of-registration fee of \$185 to the Office of the Comptroller and register with their College Registrar before leaving Toronto. They are also responsible for tuition at the host institution. The special fees for the departmental programmes are outlined in the Information booklet.

Under present awards regulations, participants may apply for various forms of Provincial assistance, and should consult their College Awards Officer concerning other awards and bursaries.

Responsibilities of the Student

Although many Departments are able to offer advice, it should be clearly understood that final responsibility for all practical aspects of the programme rests entirely with the student. Neither the Faculty nor the Departments are responsible for such matters as obtaining travel documents and reservations, finding suitable lodgings, and registering at the host university. Students are warned that many foreign universities have very early deadlines for applications.

Regulations for Attendance and Withdrawal

Students are expected to spend one Winter Session at the host university, and may be required to furnish proof of registration for the appropriate length of time at the institution(s) shown in the application form (e.g. by registration card or student book). If forced to interrupt their studies, they may return to the University of Toronto, up to the end of the third week of classes in the First Term, pay the regular fees and enrol in such courses as are available. Those who return at a later date must petition through their College Registrar, stating the reasons for interruption of their studies and requesting permission for late registration and enrolment. Up to the date specified in the Calendar, students may withdraw from the programme without academic penalty; after this date, they must petition their College Registrar.

8 Course Descriptions

In this calendar, courses are designated by their credit value as follows:

Y—full credit course

H—half credit course

To determine the periods of instruction, refer to the *Timetable and Registration Instructions* where the following course suffixes apply:

A — full course given in the *first* term of a session
B — full course given in the *second* term of a session

F — half-course given in the *first* term of a session
H — a half-course extending over *both* terms of a session

S — half-course given in the *second* term of a session

Y — full course extending over *both* terms of a session

Z — course for which no credit is given

In the Winter Session course duration is:

Y & H courses 26 weeks

A, B, F & S courses 13 weeks

Total hours of instruction are indicated by codes at the end of the course description e.g.:

52L — 52 lecture hours

26P — 26 laboratory or studio hours

52S — 52 seminar hours

26T — 26 tutorial hours

Symbols Used in Course Description and Programme Requirements

P.I. Permission of instructor required to enrol

(I) Open to first-year students (shown after course number)

(G) Course available only on the St. George Campus

Comma(,) semi-colon(;) ampersand(&) or the plus sign(+) mean AND

Solidus symbol(/) means OR.

ANTHROPOLOGY

Faculty Advisor: Professor G. Crawford
Anthropology is the study of human biology and culture and the interaction between the two. Courses are offered in three subfields of anthropology. *Physical Anthropology* is the biological study of humans and their relatives within the framework of culture. Biological studies include human osteology, human palaeontology, human genetics and adaptation, human growth, and primatology. *Socio-Cultural Anthropology* is the study of the way of life of peoples throughout the world: technologies, economies, societies, languages, and value systems; the functional interrelationships of these; and the relationship between culture and environment. *Archaeology* is the study of the physical remains of extinct cultures (e.g., habitations, tools, food remains). The goal of archaeologists is to reconstruct the cultures of the past and to trace their development from earliest times. Conclusions are drawn about the interaction of cultural and physical processes. The Anthropology programme offers the student the general background necessary for the advanced training required for professional positions. It is the special concern of the faculty to introduce students to research methods and to involve them in the research programmes of the department. Students planning an anthropology concentration should consult faculty members for advice.

Anthropologists are employed as faculty in universities and colleges, as researchers in museums, and by government. For additional information see *Anthropology as a Career* by Wm. C. Sturtevant and *The Study of Anthropology* by Morton Fried, available at the Erindale College Library.

The following Anthropology courses are considered as Science courses: ANT203Y, 228H, 229H, 231H, 311H, 312H, 330H, 332Y, 334Y, 339H, 412H, 430Y, 433H, 434H. Other ANT Science courses are offered on the St. George Campus. NOTE: Consult timetable for current offerings. Please see Section 7 for details of Programme Requirement.

ANT100Y Introduction to Anthropology
Anthropology is the global and holistic study of human biology and behaviour. This course is a survey of anthropology which includes four subfields: archaeology, linguistics, social/cultural, and physical anthropology. The material studied is directed to answering the question: what is it to be human? [52L, 26T]

ANT200Y (I) Introduction to Prehistoric Archaeology
Cultures in the Old and New Worlds from an archaeological perspective. Principles of prehistoric research will be applied to archaeological

information, from the Early Pleistocene to the beginning of written history. [52L, 26P]
Exclusion: ANT201Y, 226Y
Recommended preparation: ANT100Y

ANT203Y (I) Physical Anthropology
A survey of the field of physical anthropology. Topics will include human evolution and palaeontology, skeletal biology, human genetics and variation, human growth, primatology and human adaptation. [52L, 26T]

ANT204Y (I) Social and Cultural Anthropology
A general introductory course emphasizing social and political organization, economics, and the development of theory. Specific cases of social dynamics are drawn from both traditional and contemporary societies. [52L, 26T]

ANT207H (I) Introduction to Ethnographic Field Techniques
Recommended for those who may specialize in anthropology. Oriented around student projects; covers multiple aspects of field and research methodology (problem design, interviewing, record-keeping, quantitative analysis, etc.). [26L]
Offered in alternate years.

ANT209Y (I) Religious Behaviour and Systems of Thought
A comparative view of myth, ritual and philosophical systems with emphasis on the religion of non-literate peoples. [52L, 26T]
Offered in alternate years.

ANT210Y (I) The Anthropology of Art
Comparative approaches to art and aesthetics in world cultures and the meaning and function of art in specific cultural contexts. [52P]
Offered in alternate years.

ANT212Y (I) Traditional and Contemporary African Cultures
Survey of traditional African cultures and institutions, and the changes involved in the current movement toward industrialization. [52L]
Offered in alternate years.

ANT231H (I) Laboratory Methods in Physical Anthropology
Recommended for those who may specialize in anthropology. The student will be guided in basic laboratory procedures on specific topics as they are discussed in the survey course. [52P]
Corequisite: ANT203Y

ANT241Y (I) Indians of North America
Survey of native cultures and discussion of the role of environmental and historical factors. [52L]

ANT301H Visual Communication

Major approaches to the study of visual communication are dealt with. Bodies of visual materials, including documentary, entertainment and commercial, are analysed in terms of social and cultural contexts. [39P]

Prerequisite: ANT100Y, P.I.

Offered in alternative years.

ANT302H Advanced Visual Communication Projects

Emphasis is on the use and application of basic audio-visual resources in documenting social process. Projects may involve the use of still, movie, video-tape filming, tape recording and archival sources. [39P]

Prerequisite: ANT301H, P.I.

Offered in alternative years.

ANT304H Change in Canadian Indian Societies

A seminar course examining the application of such concepts as "acculturation", "adaptation", etc. to Canada's changing Native population. [26L]

Prerequisite: ANT204Y/241Y, P.I.

Offered in alternate years.

ANT305Y Technology, Society and Culture

The role of technology in social and cultural change and adaptation, including an introduction to basic techniques and their historical development. [78P]

Prerequisite: P.I.

Offered in alternate years.

ANT310H Prehistory of Complex Societies

A survey of prehistoric complex societies, including the rise of states in Mesopotamia, Harappa, China, Japan, Mexico, and South America. The current status of our knowledge of these states, including reasons for some early states to fail, will be reviewed. [26L]

Prerequisite: ANT200Y

ANT311H Archaeological Fieldwork

Instruction in archaeological field techniques, laboratory preparation, supervision of field and laboratory work. [26P]

Exclusion: ANT228H

Prerequisite: ANT200Y/P.I.

ANT312H Archaeological Analysis

Examines the process whereby archaeological data become meaningful. [39P]

Prerequisite/Corequisite: ANT200Y

ANT313H East Asian Prehistory

Surveys the archaeology of East Asia and relates the data to more general issues in the study of prehistory. [26L]

Prerequisite: ANT200Y

ANT314H African Prehistory

Surveys the archaeology of the African continent, from the earliest cultural evidence through the Iron Age. [26L]

Prerequisite: ANT200Y

ANT317H Archaeology of Eastern North America
Chronology and analysis of the prehistoric culture areas and stages of Eastern North America. [26L]

Prerequisite: ANT200Y

ANT327H Origins of Food Production

The history of food production in the Old and New World. Archaeological data are used to examine the processes of animal and plant domestication as well as the cultural impact of food production. [26L]

ANT330H The Biology of Sexual Differences

An exploration into the bases of human sexual differences, considering both genetics and environment. [26L]

Prerequisite: ANT203Y/P.I.

Offered in alternate years.

ANT332Y Human Origins

A survey of human palaeontology and the evolutionary stages through which man passed in becoming *Homo sapiens*. [52L, 26P]

Prerequisite: ANT203Y/P.I.

ANT334Y Human Osteology

Includes normal anatomy of the human skeleton, metrical and morphological variation, age and sex determination, palaeodemography, palaeopathology, palaeonutrition, and techniques of recovering, preserving and recording human remains. [26L, 52P]

Prerequisite: ANT203Y/P.I.

ANT339H Human Adaptability

A survey of the nature and range of biological variation in modern man. [26L]

Prerequisite: ANT203Y/P.I.

ANT343H Social Anthropology of Gender

Various theoretical approaches to the study of sex roles in traditional, modernizing, and industrial societies. [26L]

Prerequisite: ANT100Y

Offered in alternate years.

ANT351H Ethnographic Film

A survey of ethnographic film as a medium for representation of other cultures. Films using different styles and techniques of presentation will be viewed. Readings on ethnographic film. [13L, 26P, 13T]

Prerequisite: ANT204Y

ANT397H Independent Study
Supervised reading in selected anthropological topics. [T]
Prerequisite: Permission of Faculty Advisor

ANT398Y Independent Reading
Supervised reading in selected anthropological topics. [T]
Prerequisite: Permission of Faculty Advisor

ANT399Y Independent Research
Supervised research in anthropology. [T]
Exclusion: ANT430Y
Prerequisite: Permission of Faculty Advisor

ANT412H Advanced Archaeological Fieldwork and analysis of artifacts. [26L]
Prerequisite: ANT311H, P.I.

ANT416H Archaeological Interpretation
Techniques used to transform statements about artifacts and their context of discovery into statements about people and their life ways. [26L, 13T]
Prerequisite: ANT200Y
Offered in alternate years.

ANT419H Old World Archaeology: Paleolithic
Examination of the origin and evolution of culture during the Pleistocene. [26L]
Prerequisite: ANT200Y

ANT430Y Special Problems in Physical Anthropology
Supervised independent research in Physical Anthropology for students requiring science credit. [T]
Exclusion: ANT399Y
Prerequisite: P.I.

ANT432H Special Seminar in Anthropology
A research oriented seminar with topics that may vary from year to year depending on special interests of staff and students. [T]
Prerequisite: P.I.

ANT433H Palaeodemography
The study of the structure of prehistoric human populations. The course will explore aspects of mortality and fertility, and laboratory assignments will emphasize the accuracy of age and sex determination on the human skeleton. [26S]
Prerequisite/Corequisite: ANT334Y

ANT434H Palaeopathology
The study of diseases and maladies of ancient populations. The course will survey the range of pathology on human skeletons, (trauma, infection,

syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis and tumors). [26S]
Prerequisite/Corequisite: ANT334Y.

ANT499Y Advanced Independent Research
For students whose original research is leading toward a publishable report. [T]
Prerequisite: Permission of Faculty Advisor

APM courses have been renumbered as MAT courses.

Faculty Advisor: Professor John R. Percy
Astronomy, of all the sciences, is perhaps the most wide-ranging in its content and in its implications. It embraces such topics as the origin and evolution of the planets, stars, galaxies and universe; the origin of life on earth and elsewhere; the behaviour of matter in varied environments and, in general, the influence of the universe on man's thinking down through the ages. Because of its breadth, it has always formed a valuable part of a general education. With this in mind, we offer courses of interest to every student at Erindale.

Three of these are introductory courses. AST100Y is a course in which students can learn about the universe even though they do not have a scientific bent. The course has no prerequisite, is largely descriptive, and covers the full range of astronomical topics. AST200H is also designed for students whose principal interests lie outside the sciences, particularly students who wish to limit themselves to a half course. This course presents up-to-date topics in some detail, and answers often-asked questions. Since this course is given *in the evening*, it is of particular interest to part-time students. For students with a scientific interest and background, AST120Y provides a deeper insight into the physical nature of planets, stars and galaxies, and also provides some understanding of the tools and methods used by the astronomer.

Courses of a more specialized nature are also available. AST251H is a unique interdisciplinary course which examines the broad topics of the nature of life, its origin and evolution on earth, and its possible existence elsewhere in the universe. It is intended for students who have some background in the behavioural, biological or physical sciences, either in grade 13 or in university. We also recommend GSC237H as an excellent introduction to planetary astronomy. Students who wish to take a major or specialist programme in Astronomy and Astrophysics should consult the Astronomy Faculty Advisor at Erindale, as early as possible during their first year. Please see section 7 for details of Programme Requirement.

AST100Y Introduction to Astronomy

A general survey of modern astronomy which gives a descriptive treatment of the nature of planetary and stellar systems and the present conception of the structure of the universe. This course is intended for students with no science background or those who do not intend to specialize in science. It is not open to students who are currently enrolled in or have completed a 100 or higher series course in physics or a 200 or higher series course in chemistry. [52L, 26T]

Exclusion: AST120Y/200H

AST120Y A Survey of Astronomy and Astrophysics
 A general survey of astronomy in which concepts in basic physics are applied to a treatment of the solar system, stars and stellar systems, and the structure of the universe. This first-year course is intended for students who already have some background in science or those who are currently enrolled or in the future will be enrolling in science courses. [78L, 26T]
 Exclusion: AST100Y/200H
 Prerequisite: Grade 13 Mathematics R & F, C, Grade 13 Physics or O.A.C. equivalents.

AST200H The Evolving Universe
 A topical course in astronomy designed for students in disciplines other than the sciences. The emphasis will be on fields of current interest in astronomy with the aim of interpreting recent and forthcoming developments. This course is not available to students who are enrolled in or have completed a 200 or higher series course in physics or chemistry. Contributes to Science credits for distribution purposes only, and not to B.Sc. [26L]
 Exclusion: AST100Y/120Y

AST251H Life and the Universe
 The course examines several questions of broad relevance to the physical and biological sciences: the origin of the chemical elements; the formation of simple and complex molecules in astronomical environments; the origin, nature and evolution of planetary systems; the origin and nature of life and life processes; the search for extraterrestrial life through planetary exploration and inter-stellar communication. [26L]
 Exclusion: NEW251H(G)
 Recommended preparation: A basic knowledge of physical and/or biological science at the grade 13 level or beyond
 Offered in alternate years.

AST425H Research Topic in Astronomy
 Consists of a research report by the student in consultation with an individual staff member in the department. Students must enrol with the faculty advisor of the department on the Erindale Campus.
 Corequisite: AST420Y(G)

Faculty Advisor: Dr. F. Szeicz
 Biology is the science of living organisms – their kinds and relationships, origins and evolution, structure, development, and functions. Biology relates to such major human problems as starvation, overpopulation, conservation, pollution, and to the whole field of medicine and disease. Living organisms may be studied from a variety of viewpoints such as biochemical, physiological, ecological, genetical, taxonomical, structural, and developmental, and from a variety of organizational levels from populations and individuals through organs, tissues, cells and organelles, down to molecules.
 Botanists and zoologists at Erindale cooperate closely in organizing courses and programmes in Biology which stress the relationships of living organisms in terms of structure, form, function and environment at many levels of organization. All students must officially enrol in a three or four year programme at the beginning of their second year at Erindale. These programmes have varying first year requirements which should be checked before the student chooses first year courses.
 Various options are available to students of Biology at Erindale. Students can elect to take a 4-year Specialist degree or a 3-year Major degree in Biology by following the programmes outlined earlier in the calendar. By combining a Major Programme in Biology with a second Major Programme in another discipline, the student may qualify for a 4-year "double Major" degree. Another possibility is the combination of Biology and Psychology courses designated under the interdisciplinary programme in Animal Behaviour. Finally, there are 3-year and 4-year programmes in Environmental Science offered jointly with the Geography Department.
 BIO101Y is a course designed primarily for non-Biology specialists and is not a requirement in the Biology programmes. Students who have completed BIO101Y/235Y may enter a Biology specialist or major programme in their second year, and BIO101Y/235Y may then be considered as a Biology option in the Specialist, but not in the Major programme. BIO101Y meets pre-medical or pre-dental requirements.
 First year students intending to major or specialize in Biology may choose to enrol directly in BIO201Y-205H if their Grade XIII/OAC Biology mark is at least 70%. These core courses are *required* in both the major and specialist programmes, and may be taken in any order. Qualified first year students should select *only one* full course equivalent in the area that interests them most. The remainder of the core courses can be taken in later years.
 Biology courses open to First Year students without

Grade XIII/OAC Biology are BIO101Y, JBG 230Y and BIO235Y.

In the Specialist programme, which requires 8 ½ BIO options we recommend that students take at least one advanced course from each of four major areas of Biology in order to broaden their biological training. Please see section 7 (Programmes) for details of Programme Requirements. Because of limited resources, enrolment in Biology programmes and courses may be restricted. Students who began their Biology Programme in 1984-85 or earlier should consult the Biology Faculty Advisor to ensure they are fulfilling their programme requirements.

BIO101Y The Study of Life

The diversity of life forms and processes is analysed at the molecular, cellular, organismal, and community level of organization. A mix of lectures, special topic presentations, films, field trips, and laboratory exercises provides a broadly-based view of modern Biology. The course is an acceptable prerequisite for professional programmes. [78L, 39P]

Exclusions: previous or concurrent University BIO courses (JBG230Y and BIO235Y excepted).

BIO201Y (I) Diversity of Organisms

A survey of the major groups of plants and animals dealing with their taxonomy and evolution and the adaptive morphology of their organs. [52L, 78P]

Prerequisite: BIO101Y/235Y/Grade XIII/OAC Biology with a grade of 70%. (Students with less than 70% in Grade XIII/OAC Biology should not attempt this course until they have completed BIO101Y/235Y.)

Corequisite: CHM 135Y/150Y

BIO202H (I) Cell Biology

An introduction to the dynamics of cell structure and function, with emphasis on the similarities and differences of plant, animal and microbial cells. Topics include: the structure and function of macromolecules, ribosomes, membranes, nuclei, mitochondria, chloroplasts, lysosomes, cytoskeleton and other cellular constituents. In the laboratory, students will learn some current techniques of cell biology, while familiarizing themselves with practical aspects of lecture subjects. [26L, 39P]

Prerequisite: BIO101Y/235Y/Grade XIII/OAC Biology with a grade of 70%. (Students with less than 70% in Grade XIII/OAC Biology should not attempt this course until they have completed BIO101Y/235Y.)

Corequisite: CHM135Y/150Y

BIO203H (I) Introductory Genetics

Introduces the student to genetics with examples drawn from prokaryotes and eukaryotes to illustrate the basic principles of Mendelian inheritance, the molecular structure of the gene, mechanisms of gene action and regulation. Practicals will involve directed experiments illustrating these principles. [26L, 39P]

Prerequisite: BIO101Y/235Y/Grade XIII/OAC Biology with a grade of 80%. (Students with less than 80% in Grade XIII/OAC Biology should not attempt this course until they have completed BIO101Y/235Y.)

BIO204H (I) Introduction to Physiology

How animals and plants work. Follows food from ingestion through energy production to the work of the living system and finally excretion of waste. Topics covered include elementary biochemistry, nutrition, digestion, translocation and circulation, respiration, photosynthesis, hormones, muscles and nerves. [26L, 39P]

Prerequisite: BIO101Y/235Y/Grade XIII/OAC Biology with a grade of 70%. (Students with less than 70% in Grade XIII/OAC Biology should not attempt this course until they have completed BIO101Y)

Corequisite: CHM135Y/150Y

BIO205H (I) Ecology

An introduction to ecological principles emphasizing the structure and dynamics of populations, communities, and ecosystems. Practical sessions include field work in the vicinity of the College. [26L, 39P]

Prerequisite: BIO101Y/235Y/Grade XIII/OAC Biology with a grade of 70%. (Students with less than 70% in Grade XIII/OAC Biology should not attempt this course until they have completed BIO101Y)

Corequisite: CHM135Y/150Y

BIO206H Introduction to Microbiology

A survey of the major groups of microorganisms including bacteria, viruses, protozoa, and fungi. The structure and life history of representative organisms are examined. The importance of the biology of microbes will be discussed especially with regard to ecology, pathogenicity and the scientific impact of studying certain "Microbial model organisms" in elucidating important basic principles in biology. [26L, 39P]

Prerequisite: BIO101Y/Grade 13/OAC Biology with a grade of 70%, CHM135Y/150Y

Exclusion: MPL200Y (G)

JBG230Y (I) Man and Environment

Past and present man-environment relationships are examined; principles of ecology, environ-

mental ethics and esthetics are outlined; crucial alternatives for man are discussed. Problems of current environmental concern ? land use, material and energy resources, and pollution are considered and illustrated by case studies from different parts of the world. [52L, 26T]

BIO235Y (I) Field Biology

A field and laboratory course to acquaint the student with plants and animals in the local environment. Collection techniques and observation are emphasized in the field. Identification of major groups of animals and plants is studied in the laboratory. Students are required to make a major collection of a group of organisms. It is advantageous to commence this collection in the summer prior to taking this course. Further information and instruction can be obtained from the instructors. This course is open to first year students. [52T, 78P]

BIO300H Terrestrial and Freshwater Biology

This course will be offered at the Leslie M. Frost Natural Resource Centre, near Dorset, Ontario. Emphasis will be on principles and methods in plant and animal ecology, and gaining familiarity with local flora and fauna. Terrestrial and freshwater ecology will be studied. Opportunity will be provided for students to undertake projects of their own. Students are selected on the basis of their academic background, grades, and career goals. The course is given in the two week period before the beginning of the fall term. Students must meet their own costs for board, lodging and transportation. Application forms are available from Professor N.C. Collins and should be returned to the Zoology Undergraduate Secretary, St. George Campus by March 31st. Students selected will be notified promptly. Prerequisite: BIO205H and specific permission of instructor.

Exclusion: BIO332Y, ZOO471Y(G)

Enrolment limited.

BIO301H Marine Biology

A field course in Marine Biology, at St. Andrews, New Brunswick, consisting of informal lectures and seminars with intensive field and laboratory work. Different marine habitats are examined in detail and the animals and plants associated with them are classified. Students carry out projects in which they are encouraged to develop their own ideas and interests. Lectures on special topics are given by the scientific staff of the Biological Station. Students are selected on the basis of their academic background, grades and career goals. The course is given in the two-week period before the beginning of the fall term. Students must meet their own costs for board, lodging and transportation. Application forms are available

from Professor N.C. Collins.

Prerequisite: BIO205H and specific permission of instructor. Enrolment limited.

BIO302H Arctic Ecosystems

Summer field studies at Churchill, Manitoba, of approximately two weeks duration dealing with physical and biological aspects of arctic ecosystems. An individual research project is an essential part of the course. Details of the course will be announced in mid-January and students must apply to Prof. N.C. Collins, the field course co-ordinator, by mid-March.

Prerequisite: BIO205H. Students without the required prerequisite are invited to obtain approval of the instructor.

Offered in alternate years.

BIO304H Neurobiology

An expanded examination of the physiology of nervous systems. The course will investigate the electrophysiological properties of neurons and muscles, the role of the semipermeable membrane in bioelectricity, and the organization of neural circuits into higher-order processing systems (i.e. the central nervous system). Invertebrates and non-human vertebrates will be studied with particular attention to the evolution of nervous systems from nerve nets to brains. [26L, 39P]

Prerequisite: BIO204H/specific permission of the instructor

BIO310H Physiology of Regulatory Systems

This course will examine the sub-organismal, physiological responses of an animal to various external stresses imposed by fluctuations in the environment. Topics covered will include the body's internal control of temperature (thermoregulation), salt and water balance (osmoregulation), nutrient levels (digestion and excretion), as well as the neural and hormonal control of these systems. [26L, 39P]

Prerequisite: BIO204H/specific permission of the instructor

BIO311H Biology of Forest Plants

North Temperate forest flowering plants have evolved a wide range of vegetative and floral growth patterns. Students will use over fifteen, greenhouse-reared native species to study the diversity of these patterns and their adaptive significance in the forest ecosystem. Topics include floral structure and function, plant breeding systems and fecundity, plant-pollinator relationships, life cycles of both plants and pollinators. Practical instruction will enable students to perform hand-pollinations to determine breeding systems, and to learn 35mm photography. (26L, 39P)

Prerequisite: BIO101Y/201Y, BIO205H (P.I. in spe-

cial situations) plus written permission of the instructor for Year II students.

BIO312H Plant Physiology

The principal physiological processes, and the influence of environmental factors on them, will be studied in plants. Topics will include photosynthesis, water relations, mineral nutrition, translocation, respiration, general metabolism, and growth. These topics will be related to agriculture, ecology and biotechnology. [26L, 39P]

Prerequisite: BIO204H. Students without the required prerequisite are invited to obtain permission of the instructor

BIO314H Cytogenetics

Using the term Cytogenetics in its broadest sense, the course will examine aspects of biology which contribute to our understanding of the structure and behaviour of chromosomes. Topics will include an in depth study of meiosis, molecular cytogenetics, chromosome aberrations and evolution. Practicals will stress both experimental work and discussion sessions. [26L, 39P]

Prerequisite: BIO202H and 203H.
Enrolment limited.

BIO315H Advanced Cell Biology

This course will examine in depth specific topics introduced in BIO202H and introduce the students to many exciting new topics. Areas of focus may include membrane structure and function, cellular communication, the cytoskeleton, cell movement and the structure and function of selected organelles. The lectures will include experimental data and analyses to reveal how hypotheses in the field are generated and experimentally tested. In the laboratory exercises, students will be introduced to commonly employed techniques such as cellular fractionation, polyacrylamide gel electrophoresis, spectrophotometry and radioisotopic labelling. [26L, 39P]

Prerequisite: BIO202H

BIO316H Field Course in Ecology

Students may choose from a variety of field courses offered through a cooperative arrangement among ecologists at seven Ontario universities. Most courses involve a two-week period at a field site in early May or late August. A fee for room and board is usually charged over and above tuition. Lists of courses available are posted outside room 3032 in January of each year, and sign-ups are finalized by mid-March. See the Erindale coordinator, Professor N.C. Collins, for further details.

Prerequisite: Permission of Coordinator

BIO318Y Animal Behaviour

An introductory overview of the behaviour of animals presented from a zoological perspective for biology specialists. Behaviour is examined as the evolved result of interaction with other animals, such as predators, potential mates and other aspects of the environment. Other topics include behavioural genetics, development, communication, motivation and the control of behaviour by physiological mechanisms. [52L, 78P]

Prerequisite: BIO201Y

BIO319H Invertebrate Zoology

Comparative morphology of the major invertebrate phyla: protozoans, coelenterates, flatworms, nematodes, molluscs, annelids, echinoderms, and arthropods. Students learn to recognize the larger taxa within these phyla and they discover design differences in the organ systems (digestive, locomotory, reproductive, etc.) of these animals. Special attention is given to those adaptations of parasitic and pest invertebrates that contribute to their impact upon human welfare. [26L, 39P]

Prerequisite: BIO201Y

BIO330Y Plant Ecology

The relationships of plant species, populations, and vegetational complexes at the sociological, environmental, and eco-physiological levels. Practical field work, laboratory studies, and experimentation are included. The course provides a background for practical training in conservation and environmental research. [52L, 78P]

Prerequisite: BIO205H

Recommended preparation: BIO235Y

BIO332Y Freshwater Biology

A functional analysis of aquatic ecosystems. Lecture topics include: physical environments of lakes and streams; determinants of productivity of algae, zooplankton, fish and benthos; determinants of species structure of each of these groups; the processes of eutrophication and acidification. In the laboratory, aquatic measurement techniques and taxonomy and ecology of local plants and animals will be emphasized. One two-day and two one-day field trips required. [52L, 78P]

Prerequisite: BIO205H

Enrolment limited.

BIO335H Mycology

A study of the biology of fungi with emphasis on their life histories, morphology, classification, ecology and significance to man. Laboratory sessions will include the collection, culture, and identification of a wide variety of fungi. In addition, several experiments illustrating important as-

pects of fungal physiology and development will be performed in the laboratory. [26L, 39P]

Prerequisite: BIO201Y

Recommended: BIO206H

BIO352H Developmental Biology

Begins with the study of the way eggs and sperm are formed and how they interact during fertilization. Subsequently an analysis of the events of early development is detailed. Finally, selected topics of special interest to Developmental Biologists, such as regeneration, metamorphosis, pattern and polarity, and cancer are studied. The frequent use of live material in the laboratory exercises enables students to comprehend the dynamic aspects of the development of organisms. [26L, 39P]

Prerequisite: BIO202H and 315H

BIO353H Plant Developmental Biology

Developmental systems drawn mainly from plant life forms and microbes are studied. Tissue and cell culture techniques are emphasized as are applications of biotechnology to agriculture. Topics such as the hormonal control of growth and development, photoperiodicity, circadian rhythms, and environmental stimuli are studied as they influence development. Attempts are made to assemble simple rules which govern more complex patterns of development. [26L, 39P]

Prerequisite: BIO202H/204H/312H, P.I.

BIO354H Vertebrate Form and Function

A continuation in greater depth of vertebrate topics begun in BIO 201Y/251Y. The design and adaptive consequences of vertebrate structure are examined. Mechanisms of locomotion, body support, feeding, transport, gas exchange and sensory perception are compared at the organ level. Students conduct individual laboratory projects on selected vertebrates. [26L, 39P]

Prerequisite: BIO101Y/201Y

Enrolment limited.

BIO355H Taxonomy of Vascular Plants

A survey of the flora of Ontario. The emphasis of the course is on the practical identification of plants both in the herbarium and in the field. [65P]

Prerequisite: BIO201Y/235Y

BIO356H Major Features of Vertebrate Evolution

The evolution of the vertebrates as evidenced by the fossil record. Special emphasis will be placed upon the origin and adaptive radiation of major groups including amphibians and reptiles. Practical sessions will include the study of fossils, and techniques of collection and preparation. Six

laboratory sessions will be held at the Royal Ontario Museum. [26L, 39P].

Prerequisite: BIO101Y/201Y

Enrolment limited.

JBP359Y Sociobiology: Biological Bases of Social Behaviour

(Taught jointly with Psychology)

Concepts from ethology, ecology, and population biology will be introduced and applied to the understanding of the evolution and biological function of social behaviour. Topics will include altruism, aggression, social spacing, dominance, sex, parental investment and care, social symbioses, and the evolution of life histories. Emphasis will be placed on the complex social systems of insects and mammals. Laboratory sessions will involve field observations, demonstrations, and preparation of individual projects. [52L, 78P]

Prerequisite: BIO201Y/203H, PSY100Y

Enrolment limited: see Psychology Department office.

BIO360H Biometrics I

An introduction to the basic principles and procedures of biological statistics. Topics will include probability, sampling theory, descriptive statistics, estimation, comparison of samples and analysis of frequencies. Collection and analysis of biological data will be done in the laboratory. Students are advised to combine this course with BIO361H for a complete introduction to Biometrics. [26L, 39P]

Prerequisite: Written permission of instructor required for Year II students.

Exclusion: Any 200 level course in Statistics

BIO361H Biometrics II

A sequel to BIO360H in which additional topics in biological statistics are discussed. Regression, experimental design, non-parametric statistics, and a variety of analyses of variance are included. Collection and analyses of biological data will be done in the laboratory. [26L, 39P]

Exclusion: Any full course equivalent in statistics at the 200 level

Prerequisite: BIO360H

BIO370Y Microbiology

In depth discussion of microbial structure and ultrastructure; physiology and nutrition; growth and cultivation; nature of viruses (bacteriophage and a limited survey of animal viruses and their properties); the role of micro-organisms in medicine, industry, agriculture, immunology, genetics, and ecology. [52L, 78P]

Prerequisite: CHM135Y/150Y, BIO202H and 206H

Recommended preparation: CHM240Y, PHY120Y/132Y/140Y, MAT132Y/138Y

Enrolment limited.

BIO375H Modern Approaches to Biotechnology

This course is designed to introduce students to the theory and methodology of genetic engineering utilizing both somatic cell fusion approaches and recombinant DNA approaches. The importance of monoclonal antibodies and the generation of hybridoma cell lines to modern biotechnology will be discussed. Aspects of current fermentation technology, immobilized enzyme and cell techniques, and protein engineering in relation to current biotechnology will be discussed. [26L, 39P]
Prerequisite: BIO206H and 315H, CHM240Y
Corequisite: CHM360Y, BIO370Y
Recommended preparation: MAT132Y/138Y, PHY120Y/132Y/140Y

BIO404H Neuroethology

A study of the interface between traditional physiology and animal behaviour. The following questions are addressed: how nervous systems control an animal's behaviour through regulation of motor activity; how sensory organs monitor environmental change, especially the behaviour of other animals; how the central nervous system integrates sensory and endogenous information to achieve adaptive motor output. [26L, 39P]
Prerequisite: BIO304H/318Y/P.I.

BIO417Y Animal Ecology

Studies in the ecology of animal populations and communities, with emphasis on the following topics: production and population dynamics, energy flow, competition theory, predator-prey interactions, life history strategies, food-web theory, analyses of multispecies data and ecological modelling. Laboratories will include field sampling of natural populations, principles of computer modelling and group discussion of papers from the literature. [52L, 78P]
Exclusion: BIO317Y
Prerequisite: BIO205H, 360H

BIO420H Advanced Plant Physiology

Lectures, discussions, and student presentations from the current literature will be used to examine selected topics in plant physiology and development including plant hormones, water relations, morphogenesis, or plant photobiology. Responses to environmental stresses will be emphasized. [26L, 13T]
Prerequisite: P.I., BIO312H
Offered in alternate years.

BIO424H Biology of Sensory Systems

A comparative approach to sensory physiology in a wide range of animals. The course's analysis of sensory transduction and neural networks will incorporate anatomical, electrophysiological and biochemical aspects. Special attention will be de-

voted to recent publications in the field of sensory ecology and the evolution of sensory processes. [26L, 13T]

Prerequisite: BIO304H/P.I.

Offered in alternate years.

BIO430Y World Ecosystems

An investigation of the major biotic communities of the world. Their distribution, composition, structure, productivity and dynamic aspects are considered in relation to environmental influences. Practical experience includes a two week field trip commencing the week before classes begin. Communities in six of eight major site regions of Ontario from James Bay to Lake Erie will be studied. Details will be announced in January. Interested students must apply by mid-March to Prof. N.C. Collins, field course co-ordinator. [52L]
Prerequisite: BIO205H, 330Y
Offered in alternate years.

BIO433H Arctic Ecology

The Arctic environment (climate, landscape, frost phenomena) is investigated. The characteristics of soils and plant and animal life are described and studied. Problems associated with increasing human activity in the Arctic are discussed. [26L, 13T]
Prerequisite: BIO205H/P.I.
Exclusion: GGR312H
Offered in alternate years.

BIO440Y Advanced Genetics

A course designed to familiarize the student with current advances in genetics. Major topics will include: the organization of the nucleus; nuclear cycle; mutation; recombination and fine structure analysis; gene products and the regulation of gene expression; extra chromosomal inheritance. Laboratory sessions will include selected experiments and critical discussions of current literature. [52L, 52P]
Prerequisite: BIO202H and 203H and specific permission of the instructor.
Enrolment limited

BIO442H Evolution

The course focuses on mechanisms of evolution and current developments in evolutionary theory. Some of the topics that will be covered include: modes of speciation, mimicry, evolution of life history traits, punctuated evolution and molecular clocks. Students are required to develop a computer simulation of an evolutionary process for a term project. [26L, 39P]
Prerequisite: BIO203H

BIO452H Advanced Topics in Cell and Developmental Biology

This course focuses on the current state of affairs in certain areas of cell and developmental biology. Topics such as intercellular communication, cell-to-cell adhesion, cell fusion, morphogenesis and differentiation will be covered. Lectures and seminars will involve critical discussions of recently published research articles. [39L]

Prerequisite: BIO352H, P.I.

BIO455H Developmental Molecular Biology

An examination of recent information on the molecular control of development in eukaryotes. Current ideas on the regulation of nucleic acid biosynthesis (nucleo-proteins, hormones, "specificity factors") will be reviewed for plants, animals, and eukaryotic microbes. An analysis of how current data fit into the theoretical models of gene regulation and development will be made. The course will include student discussions of published research articles. This course is the same as BOT455H(G). Every other week the class meets on the St. George Campus: [13L, 26T]

Prerequisite: BIO203H and 315H and specific permission of instructor.

Corequisite: CHM360Y

BIO456H Biosystematics

A consideration of the principles of taxonomy with particular emphasis on vascular plants. Topics to be discussed include the species concept, polyploidy, numerical taxonomy and geographical and ecological variation. Each student will be required to undertake an investigation of the variation found in a selected population of plants. [26T, 39P]

Prerequisite: BIO203H, 201Y/235Y

Recommended preparation: BIO355H/specific permission of the instructor

Offered in alternate years.

BIO470Y Molecular Biology

To provide a background for students of biology and other sciences for further study in modern biology. The course will deal with microbial and viral genetics; the structure, function, and biosynthesis of nucleic acids and proteins; cell permeability; bioenergetics; regulatory mechanisms in bacteria; modern physio-chemical methods in studies of biomolecules, etc. [52L, 78T]

Prerequisite: BIO370Y, P.I.

Corequisite: CHM360Y

BIO471H Microbial Host-Parasite Interaction

This course deals with the interaction of bacterial pathogens with their respective hosts. The molecular basis of pathogenicity and the various defense mechanisms employed by hosts will be examined in depth. The medical and economic implications of pathogenesis and the role of the environment in mediating pathogenesis will be considered. The host-parasite interactions to be analyzed in this course will include systems where the hosts are animals, plants, fungi, and bacteria. [26L]

Prerequisite: BIO370Y and specific permission of instructor.

Recommended preparation: CHM360Y, MPL334Y

BIO480H Biology Research Project I

A research project carried out under the supervision of a staff member. Open to third and fourth year students. May be taken as a summer course. Students undertaking a full year project should enroll in BIO481Y, not BIO480H. Written consent of staff member supervising the project must be obtained for registration. Seminar presentation may be required.

Exclusion: Any research project full course in ZOO, BOT or MPL

Prerequisite: P.I.

BIO481Y Biology Research Project II

Similar to BIO480H except that the project extends over both the fall and spring terms. Seminar presentation may be required.

Exclusion: Any other research project course in ZOO, BOT, or MPL.

Prerequisite: P.I.

BIO482H Biology Research Project III

A second half-course in research designed for students who have already completed BIO480H.

Exclusion: Any previous full course research project in BIO, BOT, ZOO, MPL, or JBG

Prerequisite: BIO480H

JBG491Y Environmental Research Project

Independent research on an environmental topic carried out under the supervision of a staff member whose written consent is required for registration. This project course is open to third and fourth year students. A written report of the research will be required and a seminar presentation may be required.

Prerequisite: P.I.

Exclusion: All other courses in independent research

Faculty Advisor: Professor A.J. Poe

Chemistry has as its scope of intellectual inquiry the study of the processes by which substances in the inanimate and animate world are changed into other substances, both in nature and in modern industry. From an understanding of the structures and properties of atoms and molecules, changes associated with chemical reactions can be interpreted and predicted and new substances synthesized. Chemistry has a vital role in modern science-based industry and in the development of the improved quality of life and health of our society. It is more and more applied to increasing our understanding of medicine, biology, geology, psychology, metallurgy, astrophysics, and many other branches of science. As a university subject it is becoming increasingly recognized as a sound basis for the kind of imaginative and disciplined thinking that has application beyond science to many other occupations and endeavours. Chemistry also has an important role in solving the problems of energy conservation, nuclear waste disposal, environmental pollution, famine, and the many other problems of society. Many of the future advances and breakthroughs in understanding will originate from the kind of interdisciplinary research in which chemists trained to solve problems will have to be involved. The courses offered in the recommended programmes in Chemistry provide not only a basis for careers in science but a good general education of wide applicability.

Specialist Programmes: The various programmes in Chemistry offered at Erindale provide a very suitable preparation for those who intend to enter the work force in industry, to teach chemistry in high school (Type A certificate), or to continue into a graduate programme.

Five Specialist Programmes involving Chemistry are presently available at Erindale: CHEMISTRY, CHEMISTRY & BIOCHEMISTRY, GEOLOGY & CHEMISTRY, CHEMISTRY (PHYSICAL CHEMISTRY), and BIOCHEMISTRY; the detailed requirements associated with these are listed in Section 7 of this Calendar. In addition, a CHEMISTRY MAJOR programme is available for students enrolled for either a three-year or a four-year degree who wish a strong background in chemistry as part of a more general science programme. The content of each programme reflects the kind of training that is expected of students entering graduate study or other professional work in the area defined by the programme title. It is very important to plan one's programme well in advance and to consult regularly (*at least once a year*) with the faculty counsellor for each programme. (Consult Departmental Secretary/Faculty Advisor for information on counselling services

available.) It is particularly desirable to take specific courses in the year of study for which they are designed (e.g., CHM200 courses in Year II); serious timetable clashes are likely to arise if this advice is not followed. In particular, students planning a programme in which chemistry plays a major role are strongly advised to take CHM211H, CHM221H, CHM231H, and CHM240Y in their second year. While some deviations from the Specialist Programmes listed are possible, students should consult the Faculty Advisor/or programme counsellor *before* departing from the recommended programmes.

A Specialist Programme is not formally required for entry to graduate school in Chemistry or Biochemistry, but these programmes constitute an excellent preparation for this purpose. They also provide a means of attaining Type A teacher certification for those intending to teach chemistry at high school level. In addition, many of the courses listed provide excellent preparation for students whose main interests lie in the biological or earth sciences.

Please see Section 7 for details of Programme Requirement.

NOTE: The Chemistry, Chemistry and Biochemistry, and Biochemistry Specialist Programmes have recently undergone a major restructuring, which began with the second year of these programmes in 1986-87. The following guide to the numbering system which we have adopted for the chemistry courses in these programmes will probably be of some assistance in understanding the new programmes.

Courses in the CHM-1-series are analytical chemistry.

Courses in the CHM-2-series are physical chemistry.

Courses in the CHM-3-series are inorganic chemistry.

Courses in the CHM-4-series are organic chemistry.

Courses in the CHM-5-series are special topics.

Courses in the CHM-6-or-7-series are biochemistry.

Courses in the CHM-8-series are individual research projects.

Courses in the CHM-9-series are laboratory courses only.

CHM101Y Modern Physical Science and its Impact on Society

A course for students with no science background or for those who do not intend to specialize in science. The course provides exposure to experimental science, emphasizing the importance of science as an integral part of our culture. Topics include the structure of matter, the origins of sound and colour, radioactivity and its applications, chemical and physical pollution, and the

chemistry and physics of computer chips. [52L]
Exclusion: Any CHM or PHY 100 series course
taken previously or concurrently
Not offered in 1988-89.

CHM135Y General Chemistry
(Formerly CHM118Y)

Note: All first-year chemistry students must enrol in CHM135Y. Those who qualify may have their registration changed to CHM150Y in the Spring term.

Fall Term: Chemical stoichiometry, behaviour of gases, equilibria, thermochemistry, introduction to atomic and molecular structure, periodic properties of the elements.

Spring Term: Kinetics and mechanisms, applications of the principles of equilibria and kinetics, descriptive inorganic and organic chemistry.

Note: CHM135Y is a sufficient prerequisite for CHM240Y only. For other higher level chemistry courses, a standing of at least 70% must be achieved in CHM135Y. [78L, 33P, 30T]

Exclusion: CHM150Y

Prerequisite: Grade 13 Chemistry and Mathematics (R and F, C)

Corequisite: MAT132Y/138Y

CHM150Y Basic Concepts of Chemistry

Note: All first-year chemistry students must enrol in CHM135Y. Those who qualify may have their registration changed to CHM150Y in the Spring term.

Fall Term: See CHM135Y.

Spring Term: Thermodynamics and electrochemistry, introductory quantum theory and wave mechanics, molecular structure, kinetics and mechanisms, coordination chemistry, introduction to organic chemistry. [78L, 33P, 30T]

Exclusion: CHM135Y

Prerequisite: Grade 13 Chemistry and Mathematics (R and F, C) and a minimum of 60% in the fall term of CHM135Y

Corequisite: MAT132Y/138Y (PHY132Y/140Y also required for various specialist programmes in chemistry, see Section 7.)

CHM211H Fundamentals of Analytical Chemistry
(Formerly CHM215H)

A rigorous introduction to the theory and practice of classical analytical chemistry. Development and applications of basic statistical concepts in treatment and interpretation of analytical data. Gravimetric methods: direct and indirect precipitations. Volumetric methods: acid-base, complexometric, redox and precipitation titrations. Introduction to instrumental methods: potentiometry and absorption spectroscopy. [26L, 52P, 13T]
Prerequisite: CHM150Y/135Y (Grade B)

CHM221H Introductory Physical Chemistry
Equilibrium thermodynamics, internal energy, enthalpy, entropy, free energy, equilibrium (including Nernst equation), chemical potential and elementary solution theory, colligative properties. Kinetics ? review of order, molecularity, activation energy, chain mechanisms and multiple step mechanisms. Phase rule and ideal solutions (Raoult's law); phase diagrams. [26L, 39P, 13T]
Prerequisite: CHM150Y/135Y (Grade B); MAT132Y/138Y

Recommended preparation: MAT214H, 233H.
These courses are also prerequisites for third year physical chemistry.

CHM231H Introductory Inorganic Chemistry
(Formerly CHM230H)

Brief review of atomic structure; properties of the elements in relation to their position in the periodic table; theories of chemical bonding; structures and properties of ionic and metallic solids; boranes, introduction to the structures, bonding, spectra, and biochemical functions of transition metal complexes. The laboratory involves a range of synthetic, analytical, and instrumental techniques. [26L, 52P]
Prerequisite: CHM150Y/135Y (Grade B)

CHM240Y Introductory Organic Chemistry

The fundamentals of organic chemistry appropriate for students who require only a broad background in organic chemistry for their intended field (e.g., biology, pharmacy, or one of the professional faculties). The course will also serve an important role as Part I of a two or three-year sequence in organic chemistry for students enrolled in the Specialist Programmes in Chemistry, Chemistry and Biochemistry, or Biochemistry. Synthesis and reactivity of the main classes of organic compounds will be examined from the standpoint of modern theories of reaction mechanism and stereochemistry. The laboratory includes some basic organic techniques and selected examples of simple synthetic reactions. [52L, 52P(F)]
Prerequisite: CHM150Y/135Y

CHM311H Instrumental Analytical Chemistry

Introduction to the basic theory and practice underlying important techniques in analytical chemistry, chosen from three major areas of instrumental analysis; spectroscopy, electrochemistry and separation science. Specific topics will include atomic spectroscopy, x-ray fluorescence, neutron activation analysis, electron spectroscopy, voltammetry, high resolution gas and liquid chromatography, mass spectrometry, and a brief introduction to computer applications, in-

cluding instrument control and Fourier transform methods. Field trips to observe state-of-the-art equipment and methods are planned. [26L, 13T]
Exclusion: CHM314Y
Prerequisite: CHM211H
Recommended preparation: CHM221H

CHM321H Fundamentals of Quantum Mechanics and Spectroscopy
Schrödinger's equation – quantum numbers, eigenvalues and eigenfunctions. Particle in a box; degeneracy and orthogonality. Hydrogen and helium atoms, energy levels, transition probabilities. Rotation and vibration; molecular orbital theory? electronic states. NMR, IR and UV spectroscopy. [26L, 13T]
Exclusion: CHM326Y
Prerequisite: CHM221H, MAT214H, 233H/228H/238Y

CHM322H Statistical Mechanics and Applications
Classical mechanics – Lagrange's and Hamilton's equations. Statistical mechanics – canonical ensemble, entropy. Applications to ideal gas, crystals, polymers, heat capacity. Theory of the rate constant in kinetics. [26L, 13T]
Exclusion: CHM326Y
Prerequisite: CHM321H

CHM331H Inorganic Chemistry I
Coordination chemistry, bonding, formation constants. Redox equilibria and relative stabilities of oxidation states. Bonding of small molecules (CO, O₂, N₂, C₂H₄, etc.). Metal-carbon sigma bonds. Large ligands. Reaction mechanisms; reactions of ligands. Descriptive chemistry and periodic trends. [26L, 13T]
Exclusion: CHM330Y
Prerequisite: CHM231H

CHM332H Inorganic Chemistry II
Descriptive chemistry of selected groups of metals. Organometallic chemistry. Chemistry of the non-metals. Acids, bases, non-aqueous solvents. [26L, 13T]
Exclusion: CHM330Y
Prerequisite: CHM331H

CHM341H Organic Chemistry I
Structural and mechanistic organic chemistry, including stereochemistry and conformational analysis. Reaction mechanisms, including electrophilic and nucleophilic addition and substitution, as well as elimination. Theory of aromaticity; concerted reactions; reactive intermediates in organic chemistry. [39L]
Exclusion: CHM340Y
Prerequisite: CHM240Y

CHM347H Organic Chemistry of Biologically Important Compounds

The chemistry of selected classes of naturally occurring molecules such as those below, with emphasis on structure, stereochemistry, properties and synthesis. Amino acids, peptides, proteins, carbohydrates, nucleosides, nucleotides, and nucleic acids. [26L, 13T]
Prerequisite: CHM240Y
(CHM341H strongly recommended)

CHM360Y Biological Chemistry

A lecture course in general biochemistry. Topics include the physical chemistry of proteins, enzyme reaction kinetics and mechanisms, metabolic processes and mechanisms of cellular regulation, bioenergetics, membrane biochemistry, molecular genetics and protein biosynthesis. CHM360Y is equivalent to BCH321Y(G). [52L, 26T]
Prerequisite: CHM240Y
Recommended preparation: CHM221H

CHM371H Techniques in Biological Chemistry

A laboratory course to complement CHM360Y. Experiments are designed to familiarize students with techniques commonly used to study the chemical and physical properties of biological molecules. Topics covered include a wide range of chromatographic methods, the isolation and characterization of subcellular organelles, enzyme purification and kinetics, isolation and characterization of nucleic acids and lipids, and radioisotope methodology. CHM371H is equivalent to BCH371H(G). [104P]
Corequisite: CHM360Y

CHM391H Physical Chemistry and Instrumental Analysis

This laboratory course represents an integration of the study of fundamental physical chemistry, with wide-ranging applications to instrumental methods of analysis, such as separation science, electrochemistry, spectrophotometry and computer methods. The course will provide a solid grounding in many of the major topics covered in analytical and physical chemistry, and the optimization of instrumental analytical measurements by the application of physical principles. [104P]
Exclusion: CHM314Y
Prerequisite: CHM211H, 221H
Corequisite: CHM311H/321H/331H

CHM393H Chemical Synthesis Laboratory

This laboratory course comprises a series of syntheses of inorganic, organometallic, and organic compounds, supplemented by physical measurements (e.g. spectra, kinetics, etc.) of the products where appropriate. Approximately

8 weeks each will be spent on two groups of core experiments, one in organic and one in inorganic synthesis. The remaining 8-10 weeks will be occupied by a choice of inorganic, organometallic, and/or organic syntheses. [104P]
Exclusion: CHM330Y, 340Y
Prerequisite: CHM231H, 240Y
Corequisite: CHM311H/321H/331H, CHM341H

CHM414H Advanced Topics in Analytical Chemistry

Review of recent and fundamental developments of instrumentation which are revolutionizing the field of analytical chemistry. Topics will include specialized mass spectrometers and the GC/MS interface; a survey of surface-oriented techniques including electron spectroscopy, attenuated total reflection methods and photoacoustic spectroscopy; Fourier transform theory and methods; microcomputer communication, instrument interfacing and computational methods of chemometrics. [26L]
Exclusion: CHM411H (Only if taken in 1986-87/1987-88)
Prerequisite: CHM311H
Recommended preparation: CHM321H

CHM445H Organic Chemistry II

Synthesis in modern organic chemistry – the topics covered will include methods of carbon-carbon bond formation and functional group interconversion; cycloaddition reactions; oxidation and reduction. There will also be a brief introduction to the strategy of multi-step synthesis. [26L]
Exclusion: CHM440H (G)
Prerequisite: CHM341H

CHM452H, 453H Topics in Chemistry (Formerly CHM411H, 412H)

The following topics have been offered in recent years and the selection to be offered will depend on enrolments. Generally a minimum of 5 students is required before a topic is given. Interested students should consult the Faculty Advisor before the beginning of term.

Non-Aqueous Solution Chemistry

The range of non-aqueous systems, their properties and use as preparative media; classification of non-aqueous solvents; general theories of acid and base; experimental methods in non-aqueous systems and a detailed examination of specific examples, including – sulfuric acid; super acid media; liquid ammonia; hydrogen halides; dinitrogen tetroxide; liquid sulfur dioxide and dimethyl sulfoxide. [26L]
Prerequisite: CHM221H

Structural Inorganic Chemistry

Methods of structure determination including X-ray

and electron diffraction, infrared, Raman and n.m.r. spectroscopy. A survey of bonding theories and a comparison of the successes and failures of Valence Shell Electron Pair Repulsion Theory applied to the compounds of non-transition and transition elements. [26L]

Prerequisite: CHM332H

Bioinorganic Chemistry

Thermodynamic, spectral, and magnetic properties are considered to determine the structural and functional roles of metal ions in proteins, enzymes, and metal activated systems. Metallo-enzyme catalytic mechanisms are compared with those of simple inorganic complexes. [26L]

Prerequisite: CHM331H, 360Y

CHM461H Topics in Neurochemistry

This course covers specialized areas in contemporary neurochemistry. Topics will include: structure and biochemistry of neurons, neuronal systems and specialized components such as myelin and synapses; chemistry and neuropharmacology of neuro-transmitters, neuropeptides, ion channels and receptors; trophic factors and growth hormones in neuronal development; molecular basis of diseases of the nervous system. [26L]
Exclusion: CHM412H (Only if taken in 1986-87.)
Prerequisite: CHM360Y/BCH321Y(G)

CHM485H Dissertation Based on Literature Research

The dissertation will be based on literature research of a given area. Introductory reading will be necessary early in the course to bring students to a level where they can appreciate the most recent work in their topic. The dissertation will be conducted under the guidance of a chemistry faculty member on a topic other than the student's research topic in CHM489Y. [26S]
Exclusion: CHM415Y
Prerequisite: CHM221H, three CHM300-series full-course equivalents

CHM489Y Introduction to Research in Chemistry (Formerly CHM419Y)

An experimental or theoretical research problem in chemistry under the supervision of a member of the chemistry staff. The course will normally be available in either summer or winter session following completion of the student's third year programme and application for enrolment should be made to the Department in the preceding spring. A final report incorporating the aims and results of the research is required, as is an oral presentation of the work. [260P]

Exclusion: CHM419Y

Prerequisite: CHM221H, three CHM300-series full-course equivalents

See also under Greek (GRK) and Latin (LAT)

Faculty Advisor: Professor C.I. Rubincam
Classics is the study of the civilizations of Greece and Rome. These are of interest both in their own right and because their achievements have been the foundation of so many aspects of our own civilization: its art, languages, literatures, philosophy, government. Courses in Classics thus present background material which is indispensable for the understanding of many other studies in the Humanities.

Courses are offered at Erindale in three areas. The first of these (CLA) does not require knowledge of Greek or Latin. It includes courses in Greek and Roman history, for which students may receive credit towards the Specialist Programme in History. It also includes courses in Greek and Latin Literature, read in translation, and courses in mythology and religion. The other two areas are Greek (GRK) and Latin (LAT) language and literature. Beginners' courses are offered in both languages.

For other courses in Classics see also Greek (GRK), Latin (LAT), FAH101Y, 256H, 258H; HIS485Y, 486Y.

Please see Section 7 for details of Programme Requirement.

CLA100Y Classical Literature

An introduction to the study of classical literature with the reading, in English, of selected works by major Greek and Latin authors influential in shaping western literature: Homer, Greek Tragedy and Comedy, Herodotus, Plato and Aristotle; Roman Comedy, Cicero, Virgil, Horace, Ovid. [78L]

CLA201H(I) Latin and Greek in Scientific Terminology

The study of technical and scientific terms derived from Latin and Greek: word elements, formation, analysis. The course assists students in medical, biological, and related studies in making sense of the technical terminology of these fields by explaining its origins in Greek and Latin. [39L]

CLA202H(I) The Ancient Novel (Formerly GLL202H)

The human and social climate in which prose fiction arose; the Greek romances of love and adventure (Heliodorus, Longus, Xenophon), and the more ironical and socially conscious works of the Roman writers, Petronius, *The Satyricon* and Apuleius, *The Golden Ass*; parallels with modern literature. [26S]

Offered in alternate years.

CLA224H Roman Satire (Formerly GLL204H)

A reading of selected Roman satires, with emphasis on Horace and Juvenal. Verse satire is the most personal form of Roman literature and offers the modern reader a vivid and witty picture of the society of the times. Of further interest is the influence of Horace and Juvenal on the formation of modern English and European satire. [26S]

CLA232H Ancient Astronomy and Astrology (Formerly GRH232H)

Greek and Roman views of the universe; the origin and development of scientific astronomy, astrology, and star worship. [26S]

Offered in alternate years.

CLA234Y Ancient Science and Technology (Formerly CLA234H)

Early technology; the origins and development of science, and its interactions with philosophy; the achievements and limitations of ancient technology, the survival of ancient science in western culture. [52L]

CLA240Y Greek History to the death of Alexander

(Formerly GRH200Y)

Political, economic and intellectual progress and achievement in the Greek classical age. [52L, 26T]

Exclusion: CLA130Y(G) if taken in the same year of study

CLA241Y Alexander the Great and the Hellenistic Age

(Formerly GRH216Y)

The achievement of Alexander and its importance for subsequent Mediterranean history. The creation of the Hellenistic states and their historical significance. [52S]

CLA261Y Greek and Roman Religion and Mythology

(Formerly GLL190Y)

The myths of Greece and Rome will be studied in connection with the religion of the ancient world. Attention will be focussed on the origin and development of the most important myths and their significance as inspiration for art and literature. In addition, the course will include discussion of different schools of interpretation of myth, and comparison of Greek and Roman myths to those of other cultures, particularly of the Near East and Northern Europe. [52L, 26T]

Exclusion: CLA105H (formerly GLL191H)(G), CLA205Y(formerly GLL 205Y)(G)

LA300Y Greek Tragedy and Comedy

Formerly GLL300Y)

Greek drama from the origins of tragedy in the sixth century to New Comedy, with close study of selected plays of Aeschylus, Sophocles, Euripides, Aristophanes and Menander, and attention to Aristotle's *Poetics*. [52S]

LA350Y The Roman Empire

Formerly GRH202Y)

Constitutional, economic, social, military and religious developments in the empire, from Augustus to St. Augustine. [52L, 26T]

Exclusion: CLA130Y(G), if taken in the same year of study

Offered in alternate years.

LA354Y Caesar and Augustus

Formerly GRH311Y)

Their work and their contribution, as well as the role of their contemporaries: Pompey, Crassus, Cicero, Antony and Brutus. Based primarily on original sources (in translation), such as the writings of Caesar, the correspondence of Cicero, and the political testament of Augustus. [52S]

Exclusion: HIS486Y

Offered in alternate years.

LA355H Constantine the Great and His Age

Formerly GRH319H)

Power politics and religious experience in a formative period in the development of Western civilization. [26S]

Recommended preparation: CLA130Y(G)/

LA350Y

LA361Y Religion in the Roman Empire

Formerly GRH218Y)

Study of the different religious systems and beliefs competing for men's allegiance in the Roman world of the first four centuries A.D. Classical paganism and its cults; emperor worship; the philosophical alternatives to religion; astrology; the mystery religions and Mithraism; the rise of Christianity and the development of its teachings and institutions within the social context of their times; official and popular reactions to Christianity: conversion, opposition, persecution and the eventual establishment of Christianity as the Empire's sole religion. [52S]

Offered in alternate years.

LA400Y Independent Studies

Prerequisite: Permission of the Department

LA401H Independent Studies

Prerequisite: Permission of the Department

Faculty Advisor: Professor M.J. Bryant

Student Counsellor: Mrs. V. Boon

The objective of the Commerce Programmes is to help students develop analytical skills and knowledge of business and government institutions which will be useful in solving problems and making decisions while at the same time obtaining a broad education. The programmes provide a foundation on which professional and managerial skills may be built.

The *specialist* programme in Commerce and Finance, a four-year programme leading to the degree of Bachelor of Commerce, has two main areas of concentration: commerce and economics. This feature of the University of Toronto programme equips students to deal with the increasing interaction between the private and public sectors of the economy and the inter-relationships between the economies of different countries. This basic approach is incorporated into the programme by the requirement that students take a minimum of seven courses in each of commerce and economics. Students may select commerce courses to concentrate on their area of interest.

The first two years of the programme emphasize basic disciplines (accounting, economics, mathematics) and other liberal arts subjects. In the third and fourth years students build on this base by taking courses in commerce subjects such as advanced accounting, finance, marketing, administrative theory, and decision sciences, further courses in economics and courses in other subjects such as actuarial science, political science and computer science.

Graduates of the specialist programme may become accountants, actuaries, bankers, economists, financial analysts, marketing analysts, treasurers, or proprietors of small businesses. In some cases graduates of the programme undertake further university studies, such as business administration or law, or take programmes sponsored by professional associations in order to obtain professional certification as accountants, actuaries, or financial analysts.

In the *major* programme in Commerce, which may be taken as part of either a three-year or four-year programme leading to the degree of Bachelor of Arts, students may take fewer commerce courses but have the opportunity to combine the study of commerce with that of other subjects such as computer science, mathematics, political science, international relations, or languages. Courses in both the specialist and major programmes are available to students in the evening hours so that part-time students may enter the programmes.

BECAUSE OF LIMITED RESOURCES, ENROLMENT IN BOTH PROGRAMMES AND IN COURSES IS RESTRICTED. Admission to the programmes is normally made at the beginning of the student's second year at the University and is based on the student's marks in the courses taken to date at the University.

Both the University of Toronto degree programmes in Commerce are offered at Erindale: Commerce and Finance Specialist (B.Com.) and the Major in Commerce (B.A.). In addition COM100 series courses are available to students seeking degrees outside the Commerce discipline. All Commerce courses above the 100 level require ballots to be filed in the Commerce Office in the Spring. The ballots will be used as a basis for checking whether the students are eligible to enroll in the course and to allocate places in courses which become oversubscribed. Please see Section 7 for details of Programme Requirements.

In 1988-89 almost all courses in Commerce have been renumbered.

Numbers assigned to courses will be based on the following classifications:

- 010 – Economics
- 020 – Accounting
- 030 – Finance
- 050 – Marketing
- 060 – Organizational Behaviour
- 070 – Information Systems
- 090 – Law and Management

COM101Y Introduction to Business

This course will provide students with an appreciation of the role of business in Canadian society. It will show how the drive for profits induces business to combine different functions – marketing, production, human resources, and finance – to generate goods and services desired by consumers. The course will also deal with controversial public issues revolving around the relationship between business, government, labour and society. [52L]

COM120H Financial Accounting I
(Formerly COM102H)

An introduction to the theory and concepts of financial accounting. The course will consider the uses and users of financial statements as well as issues concerning financial statement presentation. [26L, 13P]

Exclusion: COM100Y, 203H

COM121H Financial Accounting II
(Formerly COM103H)

Financial accounting issues are addressed, including revenue recognition, valuation models and accounting for liabilities. The course will emphasize the role of judgement in the preparation of financial statements. The course is intended for students concentrating in accounting. [26L, 13P]

Exclusion: COM100Y, 222H/205H

Prerequisite: COM120H/102H with at least a C grade

POL209Y Public Administration and Public Policy in Canada
(Formerly POL307Y)

Combines a study of the organization, processes and issues in Canadian public administration with a study of the institutions and processes involved in policy making. Also focuses on the study of specific policy areas including some of the following: economic policy, social welfare, regional disparities, and industrial development. [52L]

Prerequisite: COM120H/102H/121H/103H/
POL100Y/102Y

(Note: Students may count only one of POL209Y or POL317Y as COM courses if both have been taken).

COM220Y Management Accounting

The development of information for management decision making and control. Topics include costing, capital budgeting, and selected analytical tools such as regression analysis and linear programming models. Case discussion and computer applications will be used where appropriate. [52L]

Exclusion: COM221H/204H

COM221H Managerial Accounting
(Formerly COM204H)

Introductory course in managerial accounting. [26L]

Exclusion: COM220Y

COM222H Financial Reporting
(Formerly COM205H)

Issues in financial accounting and reporting will be examined. The role of financial accounting in a market economy will be studied. The course will provide students with the analytical tools necessary to indicate the effects of differences in accounting procedures and their effects on the financial statements of the firm. Not intended for students concentrating in accounting. [26L, 13P]

Exclusion: COM121H/103H, 320Y

Prerequisite: COM120H

NOTE: To enrol in a 300 series course a student must have standing in at least 9 courses.

COM310Y Managerial Economics

(Formerly COM325Y)

The micro-economic tools of analysis relevant to management problems in both the private and public sectors. Topics include the nature of the firm, empirical demand and cost analysis, the economics of risk and uncertainty, the economics of information, public enterprise economics, the economics of regulation and regulatory practices in Canadian industry, transfer pricing problems, technological change and market structure. In the B.Com. programme this course qualifies as either a Commerce or an Economics course. [52L]

Prerequisite: ECO200Y/206Y/210Y, MAT132Y/138Y, ECO220Y/227Y/ STA242Y/262Y

POL317Y Introduction to Public Administration and Public Policy

(Formerly POL207Y)

Major theories and concepts in the fields of public administration and public policy, drawing on the experience of Canada and other advanced industrialized nations. [52L]

Exclusion: POL207Y

Prerequisite: POL100Y/102Y/104Y/203Y/205Y/209Y

(Note: Students may count only one of POL209Y or POL317Y as COM courses if both have been taken).

COM320Y Financial Accounting Theory and Policy

Theory of and critical examination of corporate financial reporting and generally accepted accounting principles. [52L]

Exclusion: COM222H/205H

Prerequisite: COM100Y/121H/103H

COM330H Investments

(Formerly COM324H)

Security analysis and portfolio management.

Emphasis is placed on an analysis of bonds and common stocks. [26L]

Corequisite: COM337Y

COM331Y Finance

The financial decision-making process including the financing, investment, and dividend decisions of the firm. Institutional aspects of finance, with emphasis on the characteristics of various debt and equity instruments available in Canadian capital markets. (Available to students in the Major in Commerce and Business Certificate Programmes). [52L]

Exclusion: COM337Y

Prerequisite: ECO220Y/227Y/STA242Y/262Y

COM337Y Business Finance

Valuation models, cost of capital, capital budgeting, investment under uncertainty, the use of leverage, dividend policy, the financial environment within which Canadian companies operate and the characteristics of various debt and equity instruments available in the Canadian capital market. [52L]

Exclusion: COM331Y

Prerequisite: ECO220Y/227Y/STA242Y/262Y, ECO200Y/206Y/210Y, 202Y/208Y/212Y

COM350Y Marketing

Market definition, consumer behaviour, and marketing functions: product line development, pricing, distribution, promotion, salesforce management, advertising, research, and planning. [52L]

Exclusion: COM351H/349H

COM351H Fundamentals of Marketing

(Formerly COM349H)

Study of the interacting institutions and business activities designed to plan, price, promote and distribute products and services to present and potential consumers. (Available to students in the Major in Commerce and Business Certificate programmes). [26L]

Exclusion: COM350Y

COM362H Theory of Administrative Behaviour I

(Formerly COM341H)

Theoretical ideas and empirical data concerning individual and group behaviour in organizations. Relevance of these for problems confronting management: motivation, influence, communication, supervision and decision making. [26L]

Exclusion: WDW103Y/260Y

COM363H Theory of Administrative Behaviour II

(Formerly COM342H)

Evolution of managerial and organization theory and practice from the classical approach of bureaucratic theory to the concepts of the organization as an open system. The managerial assumptions and implications applied to organizational problems. [26L]

Exclusion: WDW103Y/260Y

COM371H Introduction to Business Information Systems

This course has been designed to provide students with a basic understanding of the computer systems that are so central to modern organizations. Unlike programming courses, the focus here is on the knowledge that will enable students to use computer-based systems and to participate in their development. The course covers the technology, design, and application of data

processing and information systems with emphasis on managerial implications. A wide variety of applications will be studied, and students will gain experience in using a data base management system. No previous background in computing is assumed. [26L]
Prerequisite: COM220Y
Exclusion: CSC104H

COM390Y The Legal Environment of Business (Formerly COM300Y)
Development of an approach to reaching decisions objectively and examination of how law, as an institution, accommodates business convenience and social policy. Analysis of legal devices commonly encountered in the operation of a business. [52L]

NOTE: To enrol in a 400 series course a student must have standing in at least 14 courses.

COM401H/402H Supervised Reading Course on an Approved Subject (Formerly COM437H)
Open when a faculty member is willing and able to supervise. Students must obtain approval of a Committee of the Commerce Faculty, The Director of Commerce and supervising faculty member before enrolling.
Prerequisite: Cumulative GPA of at least 2.70

COM420Y Accounting Literature and Research
Seminar for the critical discussion of research bulletins and monographs of the leading accounting bodies in Canada, the United States and Britain, of articles in scholarly and practitioner accounting journals, etc. Review of contemporary and controversial issues in accounting theory. [52S]
Prerequisite: COM320Y with at least a C

COM421H Auditing (Formerly COM430H)
A study of the concepts and theory underlying audit practice. Cases are used to develop professional judgement and skills useful in practice. [26L]
Prerequisite: COM320Y, ECO220Y/227Y/STA242Y/262Y

COM423Y Canadian Income Taxation
Introduction to the technical provisions and broad policy issues involved in Canadian taxation of business enterprises in Canada. [52L]

COM426H Advanced Accounting
Consideration of accounting practice in the context of accounting theory and concepts of a number of areas including intercorporate investments, foreign currency translation, deferred taxes, accounting for general purchasing power, and current value accounting. [26L]
Prerequisite: COM320Y with at least a C-

COM428H Management Control
The case method will be used to provide an understanding of the issues and environment of management control, and will integrate material from other courses in Commerce and Economics in the solution of problems in systems design and operation. [26S]
Prerequisite: COM220Y with at least a C

COM431H Advanced Topics in Finance (Formerly COM424H)
The areas of concentration will depend on the particular instructor teaching the course and may focus on financing problems in either the private or public sectors [26L]
Prerequisite: COM337Y

COM452H Marketing Management (Formerly COM410H)
Emphasis on marketing management in a dynamic environment. Deals with decision-making concepts and tools useful in identifying, structuring and solving marketing problems, planning and control. [26S]
Prerequisite: COM350Y

COM453H Research and Analysis in Marketing (Formerly COM435H)
How information can be acquired outside the firm; specification, gathering, analyzing and interpretation of information to reduce the uncertainty of management decisions. Emphasis on evaluating the reliability and validity of information by identifying sources of error, and methods of minimizing them. [26L]
Prerequisite: COM350Y, ECO220Y/227Y/STA242Y/262Y

COM491H Introduction to International Business (Formerly COM427H)
This is a general introductory course in international business for the relatively advanced student. Its principal focus is development of management skills which will be useful for firms engaged in international business. Topics of international economics (trade theory, foreign exchange, foreign direct investment, etc.) are covered from the manager's viewpoint. A substantial part of the course is devoted to the problems of managing multinational corporations in this environment. [26L]

COM492H Management Policy and Strategy
(Formerly COM450H)

Choice of corporate purposes and definition of needs, the mobilization of resources and moulding of organizational character for the attainment of goals. Analysis of the conditions for the survival and growth of the corporation as it relates to (1) external environmental threats and opportunities, and (2) the assessment of internal strengths and weaknesses. [26L]

Prerequisite: COM337Y, 350Y

Faculty Advisor: Professors M.G. Luby and C. Rackoff

Computer Science is concerned in the broadest sense with the study of computers and of applications of computers. Its development was stimulated by the use of computers in many areas, such as Engineering, Physics, Chemistry, Biology, Statistics, and business. Yet Computer Science involves much more than just developing techniques for these application areas.

Computer Science as a discipline encompasses a wide range of research interests. Examples are: the design and implementation of computer programming languages, the design and organization of complex computer systems, the efficient allocation and use of computer resources under various constraints, and the organization and management of vast quantities of data typical in many business applications. Computer Graphics is the study of the application of computers to the analysis and generation of pictorial information. Theoretical interests in Computer Science include the study of computability – what can and cannot be computed by machines; of complexity – the relative effort required to perform various computations; and of verification – the formal proof of the correctness of programs. Artificial Intelligence research in Computer Science is concerned with using computers to simulate intelligent behaviour, with the development of programs that can process pictorial and linguistic data, prove theorems, solve problems, etc. Numerical Analysis is concerned with the design, testing and analysis of numerical methods for solving computational problems in science and engineering.

Course offerings in Computer Science are intended to serve a wide variety of students, ranging from those whose primary interest is in information processing, to those interested in applying computers to other fields.

Enrolment is restricted in all CSC programmes (except the Minor) and in all courses above the 100 level. Consult the Calendar Supplement and the Department for details of how to apply.

Admission to restricted courses depends on performance in past CSC courses, but a student admitted to a programme will always be admitted to the courses needed for that programme.

Admission to restricted programmes depends on performance in the courses required in first year. The necessary average in the required courses for admission during 1987 was 65%, though it may change for 1988. See the programme descriptions for an indication of which courses are required.

CSC148H and CSC158H are the standard first year courses for students who plan to continue with further courses in Computer Science in later years.

For more information on the Programmes obtain a copy of the Computer Science Undergraduate Student Handbook from Room 4037.

Please see Section 7 for details of Programme Requirement.

NOTE: No late registration is permitted in any CSC course after the first two weeks of classes. Students may change from higher-level to lower-level introductory courses until the end of the sixth week of term.

CSC104H How Computers are Used

Parts of a computer and their interconnection. System operations: commands, files, security.

Common applications: games, text processing, spreadsheets. Problem solving with computers: algorithms and basic programming concepts. Other applications and topics; data organization, communications, office automation, artificial intelligence, computing in other academic disciplines. (Students will use microcomputers and will do some programming, but the aim of the course is to show how computers are used, not to teach programming.) [26L, 13T]

Exclusion: VIC104H, SMC104H, any grade 12 or 13 high-school, college or university course in computing or data processing.

CSC108H Computer Programming

Introduction to programming in a high-level language such as Turing. Fundamental constructs: if statements, loops. Operations on strings and numbers. Data and program restructuring using arrays and subprograms. Applications including sorting. Further topics chosen from recursion, record structures, other languages. [26L, 13T]

Exclusion: CSC139H, 148H, 149H, 150H, 201H(G)
Prerequisite: Grade 12 Mathematics

CSC148H Introduction to Computing

An introduction to algorithms and problem-solving with computers. Programming in Turing, including an introduction to simple data structures, string manipulation, recursion, linked lists, program correctness, and floating-point calculations. Comparison of several internal sorting algorithms. Brief exposure to machine language programming. (More intensive than CSC108H; intended primarily for students who plan to pursue any of the Programmes sponsored by this department.) [26L, 13T]

Exclusion: CSC108H, 139H, 149H, 150H, 201H(G)
Prerequisite: Grade 13 Mathematics R&F and C
Corequisite: MAT132Y/138Y

CSC158H Computer Applications

A continuation of CSC148H or CSC150H. An introduction to the representation and applications of graphs, computer simulation models, computer graphics, artificial intelligence, and numerical methods. The use of data types such as stacks, queues, trees, and heaps. Some exposure to languages such as Fortran, PL/I, and Pascal. [26L, 13T]

Exclusion: CSC118H, 160H, 202H(G)

Prerequisite: Grade 13 Mathematics R&F and C, CSC139H/148H/149H/ 150H

Corequisite: MAT132Y/138Y

CSC228H File Structures and Data Management

An introduction to the hardware and software aspects of data processing, including the Cobol language. Emphasis will be placed on external file accessing. External storage device characteristics. File accessing and organization. Methods of indexed sequential organization and direct organization. Single and multiple attribute file accessing. External sorting. Buffering, blocking, data encoding. Introduction to data base management. Additional topics include decision tables, project management, documentation standards. [26L, 13T]

Prerequisite: CSC158H/160H

CSC238H Discrete Mathematics for Computer Science

A rigorous treatment of certain aspects of discrete mathematics with applications to computer science. Emphasis will be placed on the basic properties and fundamental algorithms concerning integers (including induction, Euclidean algorithm, modular arithmetic), and on logic (including propositional and predicate calculus and simple formal theories). Application of these ideas will be made to topics such as program correctness, formal program verification, algorithms from graph theory, and elementary set theory. [26L, 13T]

Prerequisite: CSC158H/160H

CSC258H Computer Organization (Formerly CSC257H)

Computer structures, machine languages, instruction execution, addressing techniques and digital representation of data. Computer system organization, memory storage devices, microprogramming. Block diagram circuit realizations of memory, control and arithmetic functions. There will be three laboratory periods in which students will conduct experiments with digital logic circuits. [26L, 9P, 13T]

Prerequisite: CSC158H/160H

CSC324H Principles of Programming Languages
(Formerly CSC248H)

A wide variety of programming styles and the programming languages that support them. Emphasis on recursion and concurrency, but other programming regimes such as backtracking and coroutines may also be covered. Language features influencing these regimes such as pattern matching, programs as data, and module encapsulation. Examples from a number of contemporary programming languages such as LISP, Concurrent Euclid, C, Prolog, Smalltalk, and Simula. [26L, 13T]

Prerequisite: CSC238H

CSC350H Numerical Algebra and Optimization
Solution techniques for systems of linear equations and least squares problems, including LU- and QR-based methods. Algorithms for optimization problems, including linear programming, and for systems of nonlinear equations. [26L, 13T]

Exclusion: CSC336H

Prerequisite: CSC158H/160H, MAT140Y(G)/225Y(G)/228H, MAT234Y/ 235Y/238Y

CSC364H Effective and Efficient Computing
Measuring algorithm performance. Techniques of efficient algorithm design: divide and conquer, greedy method, dynamic programming, graph traversal, change of representation. Introduction to complexity theory: models of computation, P, NP, polynomial time reducibility, NP-completeness. Introduction to theory of computation: Church's thesis, computable and noncomputable functions, recursive and recursively enumerable sets, universality, many-one reducibility. [26L, 13T]

Prerequisite: CSC238H

CSC378H Information Structures

An advanced study of major classes of information structures with an emphasis on the design, analysis, and implementation of non-numerical algorithms, using an abstract data types approach. Review and synthesis of internal and external data organization and accessing, including searching and sorting. Advanced topics on linear lists, graphs, trees, sets, hash tables, and files. Dynamic storage allocation and garbage collection. Relations and relational algebra. An overview of problem-solving techniques. [26L, 13T]

Exclusion: CSC334H(G), 356H

Prerequisite: CSC228H, 238H

CSC488H Language Processors
(Formerly CSC368H)

Compiler organization, compiler writing tools, use of regular expressions, finite automata and context-free grammars, scanning and parsing, run-time organization, semantic analysis, implementing the runtime model, storage allocation, code generation. [26L, 13T]

Prerequisite: CSC324H, 356H/378H

CSC492H Computer Science Implementation Project

This half-course involves a significant implementation project in any area of Computer Science.

The project may be undertaken individually or in small groups. The project is offered by arrangement with a Computer Science faculty member.

Exclusion: CSC494H(G), 495H(G)

Prerequisite: At least three 300 level CSC half-courses and permission of the Discipline Representative

CSC493H Computer Science Expository Work

This half-course involves a significant literature search and expository work in any area of Computer Science. This work must be undertaken individually. It is offered by arrangement with a Computer Science faculty member.

Exclusion: CSC494H(G), 495H(G)

Prerequisite: At least three 300 level CSC half-courses and permission of the Discipline Representative

Recommended preparation: INE203H

Faculty Advisor: Professor J.H. Astington

The study of drama invites the student to consider a form of art as old as mankind. Facilities at Erindale provide opportunities for a full and varied exploration of the nature of drama: courses in dramatic literature, theatrical history, and theatre practice enable the student to experience a number of different approaches to understanding. An equipped Studio Theatre is available for rehearsal and performance.

NOTE: *This programme does not correspond with the programmes offered by University and Scarborough Colleges.*

Please see Section 7 for details of Programme Requirement.

DRM120Y Drama on the Stage

Through the study of six plays from the Greek through to the modern theatre the course will consider original conditions of staging and performance, and examine how historical knowledge might be applied to productions of the plays today. [52L, 26S]

Offered in alternate years.

DRM200Y Acting I

Basic areas of acting technique in speech and movement; problems of portrayal of character; phenomena of theatrical communication (actor to actor, actor to audience, and "feedback") and techniques for their control. Students will be expected to participate in public productions and to prepare for classes as for rehearsal (line learning, research). [104P]

Prerequisite: Permission of Department Enrolment limited.

DRM300Y Acting II

Detailed work on acting technique and the interpretation of the play text. Students will be expected to work on their own to a considerable extent, in preparation of scenes for group discussion, and to work on productions arising from the course. The work of DRM200Y will be continued in a more advanced and intensive way. [104P]

Prerequisite: DRM200Y or equivalent and permission of Department Enrolment limited. P.I.
Offered in alternate years.

DRM390Y Independent Study

An independent project in drama studies, chosen by the student and supervised by a member of the faculty. A written proposal, signed by the supervisor, must be submitted for approval to the Faculty Advisor before registration.

Prerequisite: Two DRM courses; permission of Faculty Advisor

Faculty Advisor: Professor M.J. Hare

Economics is a social science; that is, it is an exploration of the behaviour of people in society. It has a strong influence on the structure, well-being and development of a society. More specifically, Economics studies the ways in which the resources of a country (capital, labour, land and natural resources) are allocated between industries to efficiently produce the range of goods and services provided in the country each year. The decisions of what to produce, of production methods, and how to distribute the goods and services provided must be made in each country irrespective of the political organization of the government in that country. Allocative decisions are made according to traditional patterns and customs; by government decree, policies and planning, and finally by the allocative mechanisms inherent in the price system.

At the aggregate level, Economics considers such problems as excessive levels of unemployment and inflation in the Canadian economy, and analyzes policies which can mitigate these burdens. The study of Economics also assesses the fairness of the tax burden, and the degree to which government spending can be justified. At a more micro or disaggregated level, economic analysis considers the determination of economic efficiency in different types of industry (e.g., oligopoly, and pure competition); the impact of anti-trust regulations, and the determination of prices of both outputs and inputs through the forces of supply and demand. Economic assessments of international trade patterns, tariffs and the consequences of foreign direct investment are also integral.

In addition, economic analysis focuses on such issues as pollution, poverty, the rate of economic growth and urbanization, regional disparities and energy analysis, topics which are ubiquitous in today's newspapers.

The course sequence in Economics at Erindale is intentionally designed to accommodate the interests of students who wish to specialize in this discipline, and concomitantly, those who wish a broader assessment.

Students who concentrate in Economics frequently continue into graduate work in Business or Economics, or proceed into Law, Chartered Accountancy and many other areas of industry and government.

Economic theory now makes considerable use of mathematics in some of its enquiries. A student who chooses to specialize in Economics must take at least one basic course in Mathematics. First year preparation: ECO100Y and MAT132Y/MAT138Y.

Programmes: Economics, Economics (Commerce and Finance), Economics and Political Science.

NOTE: The enrolment in most Economics courses above the 100 level (and therefore, in all Economics programmes) is restricted. Academic performance requirements (enrolment criteria) are necessary for ECO200 and 300 level courses. ECO220Y/STA242Y/262Y (but not STA202H and 212H) is required for most ECO300 level courses. Students should consult this Calendar, the Calendar Supplement and the information bulletins (available from the Department Office at Erindale) which set out the course enrolment criteria.
Not all courses are offered each year.

Please see Section 7 for details of Programme Requirement.

ECO100Y Introduction to Economics

A survey course with emphasis on the basic concepts and techniques of macro and micro economic theory. The concepts introduced will include: national income and its determination; monetary and fiscal techniques; the derivation and use of supply and demand schedules; the theory of the firm; and principles of comparative advantage and foreign exchange fluctuations. [78L, 26T]

NOTE: Academic performance requirements are necessary as a condition for enrolment into ECO200 level courses. (See Economic Enrolment Criteria details at the Departmental Office at Erindale and prerequisite information listed below for ECO200 level courses.)

ECO200Y Microeconomic Theory

An intermediate treatment of the basic tools of economic analysis with applications to a wide variety of economic problems in the area of pricing, resource allocation, income distribution, and welfare economics. Intended primarily for students in the Economics Major and Minor programmes. [52L, 26T]
Exclusion: ECO206Y
Prerequisite: ECO100Y with at least 60%

ECO202Y Macroeconomic Theory and Policy
Macroeconomics, monetary economics, economic stabilization, capital markets and international monetary economics. Theories of output, employment and the price level in closed and open monetary economies are described; and the costs and benefits of stabilization policies in the context of these theories are identified. Intended primarily for students in the Economics Major and Minor programmes. [78L]
Exclusion: ECO208Y
Prerequisite: ECO100Y with at least 60%
Corequisite: MAT132Y/138Y

ECO203Y Modern European Economic History
The economic development of modern Europe, with emphasis on the industrialization process and agrarian change in major European countries with concentration on the period from 1750 to 1939. [52L]

Exclusion: ECO101Y(G)/201Y(G)

Prerequisite: ECO100Y with at least 60%

ECO206Y Microeconomic Theory

This course deals more rigorously with the material included in ECO200Y and is intended primarily for students in the Economics Specialist programmes and for students in the Commerce and Finance (B.Com.) programme who have the prerequisites. [52L, 26T]

Exclusion: ECO200Y

Prerequisite: ECO100Y with at least 70%,
MAT132Y(60%)/138Y(55%)

ECO208Y Macroeconomic Theory

This course deals more rigorously with the material included in ECO202Y and is intended primarily for students in the Economics Specialist programmes and for students in the Commerce and Finance (B. Com.) programme who have the prerequisites. [78L or 52L, 26T]

Exclusion: ECO202Y

Prerequisite: ECO100Y with at least 70%,
MAT132Y(60%)/138Y(55%)

ECO220Y Quantitative Methods in Economics

An introduction to the use of statistical analysis, including such topics as elementary probability theory, sampling distributions, tests of hypotheses, estimation; analysis of variance and regression analysis. Emphasis is placed on applications in economics and business problems. [52L, 26T]
Exclusion: ECO227Y, STA202H, 212H, 222Y, 242Y, 262Y, GGR202H, 212H, PSY201H, 202H, SOC201Y
Prerequisite: ECO100Y with at least 60%,
MAT132Y/138Y

ECO221Y Canadian Economic History Since 1500
Canadian economic growth and development from the sixteenth century to the present. Reference to relevant topics in United States economic history, especially during the colonial period. [52L]
Exclusion: ECO222Y
Prerequisite: ECO100Y with at least 60%

ECO222Y Canadian Economic Development Since Confederation
Canadian economic growth since the mid-nineteenth century; emphasis on the application of economic theory and data to historical issues. [52L]
Exclusion: ECO221Y
Prerequisite: ECO100Y with at least 60%

ECO227Y Quantitative Methods in Economics
This course deals more rigorously with the topics included in ECO220Y and is intended primarily for students in the Economics Specialist programmes, students in the Commerce and Finance (B.Com.) programme who have the prerequisites and for students planning to take ECO327Y. [56L, 26T]

Exclusion: ECO220Y, STA202H, 212H, 222Y, 242Y, 262Y; GGR202H, 212H, PSY201H, 202H, SOC201Y

Prerequisite: At least 70% in ECO100Y, MAT132Y(60%)/138Y(55%)

ECO244Y Industrial Relations

The role, structure, and performance of industrial relations within the framework of Canada's socio-economic-political system. Growth and history of the Canadian Labour movement: its philosophy and structure. Management's strategies and tactics in collective bargaining; public policy in the field of industrial relations; strikes in so-called emergency situations: the role of unions and collective bargaining in inflation. [52L]

ECO311H Government Policy Toward Business
(A continuation of ECO366H)

Government policies affecting the private sector; possible improvements in current policies. Emphasis on competition and anti-combines policy, the regulated industries, the patent system, externalities and market failure, and the industrial implications of tariff policy. [26L]

Exclusion: ECO310Y

Prerequisite: ECO366H

ECO312H Economics of Public Regulation

The efficiency and equity aspects of the regulation of public utilities. Economic theory, finance, politics, empirical evidence, and administrative law. The recent deregulation movement. [26L]

Prerequisite: ECO200Y/206Y, 220Y/227Y/
STA242Y/262Y

ECO320Y An Economic Analysis of Law

This course will examine the economic basis for the law. The material will include an analysis of liability rules, including the Tort System, no-fault systems, worker's compensation, and consumer protection legislation. The appropriate economic measures of damages in tort cases will be discussed. Property rights will be considered in depth. Other topics include contracts, bankruptcy, crime, and law enforcement. [52L]

Prerequisite: ECO200Y/206Y

ECO322Y History of Economic Thought

This course analyzes the development of economic thought in the eighteenth and nineteenth centuries, concentrating on the writings of Adam Smith, David Ricardo, J.S. Mill and Karl Marx. Methodological questions are raised and lead to a general assessment of alternative approaches to interpreting the history of economics. [52L]

Prerequisite: ECO200Y/206Y, 202Y/208Y

ECO324Y Economic Development

Emphasis is on the economic conditions of low-income countries and the prospects for their economic growth and development. Frequent reference will be made to specific issues affecting the nations of Africa, Asia and Latin America, such as food procurement, high rates of inflation, levels of international indebtedness and foreign exchange shortages. [52L]

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/
227Y/STA242Y/262Y

ECO325H Advanced Economic Theory – Macro

To develop the understanding of the economic foundations of macroeconomic theory and to develop analytical skills in constructing and solving macro economic models. [26L]

Prerequisite: ECO208Y/202Y with 70%, 220Y/
227Y/STA242Y/262Y

ECO326H Advanced Economic Theory

Imperfect information is incorporated in micro-economic theory. The impact of imperfect information on the insurance decision and insurance markets is considered in depth. Principal-agent theory is also applied to employment contracts. [26L]

Prerequisite: ECO206Y/200Y with 70%, 220Y/
227Y/STA242Y/262Y

ECO327Y Applied Econometrics

The development and application of those statistical techniques that are used in the testing of the implications of economic theory. [52L]

Prerequisite: ECO200Y/206Y, 202Y/208Y
227Y/220Y with 70%/STA242Y with 70%/262Y
Recommended preparation: MAT228H

ECO333Y Urban Economics

This is a course on the application of economic analysis to four major areas of urban activity. The areas are land markets, housing and buildings, transportation and public finance. In each area, we will consider the role of the government and attempt to understand the source of many current urban economic problems. [52L]

Prerequisite: ECO200Y/206Y, 220Y/227Y/
STA242Y/262Y

ECO336Y Canadian Public Finance

The construction of an economic theory of government to explain the determination of the budget and to provide an economic rationale for government intervention; an analysis of changing patterns of expenditure and revenue of federal and provincial governments; the development of criteria for the evaluation of expenditure programmes and the tax structure; the problems and techniques of fiscal stabilization. [52L]

Exclusion: ECO236Y, 345H

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/227Y/STA242Y/262Y

ECO348H Monetary Economics and Stabilization Policy

Theoretical foundations and empirical studies of monetary analysis and policy: the channels relating money, interest rates, prices and economic activity as the basis for assessing the role of monetary policy in stabilization policy. [26L]

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/227Y/STA242Y/262Y

ECO350Y Seminar on Selected Subjects

Offers a seminar in a different subject each year. Students require written permission of the Assistant Chairman in addition to minimum prerequisites published for each seminar. [52L]

Exclusion: ECO351H, 352H

ECO351H/352H Seminar on Selected Subjects

Offers a seminar in a different subject each year. Students require written permission of the Assistant Chairman in addition to minimum prerequisites published for each seminar. [26L]

Exclusion: ECO350Y

ECO360Y Industrial Growth and Technological Change

Examines theories of capitalism; the forces behind growth in the industrial countries and the benefits and costs of economic growth. Emphasis is placed on technological change and the environmental consequences of industrialization. References are made to the patterns and sources of economic growth in Canada, the United States, Japan and selected European countries. [52L]

Exclusion: ECO313H

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/227Y/STA242Y/262Y

ECO361Y Labour Economics

(Formerly ECO361H and ECO362H)

Analysis of theory, evidence and policy for a number of labour market topics such as hours of work, job sharing and part-time employment; participation rates; education and human capital; the wage structure and income distribution; sex

discrimination; unemployment; the rate of wage change and wage-price controls; unions and collective bargaining. [52L]

Exclusion: ECO239Y/339Y

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/227Y/STA242Y/262Y

ECO363Y Modern Economic Institutions

The economic analysis of modern economies from an institutional perspective. Topics will include the institutional foundations of the contemporary economies of Great Britain, Canada, the United States, and Sweden. Another principal theme is the relationship between plans and markets in the USSR and Eastern Europe. Finally, the interactions between traditions, markets and socialist practices in East Africa will be examined. [52L]

Prerequisite: ECO200Y/206Y

ECO364H International Trade Theory

An analysis of the nature, effects and policy implications of international trade theory; the theories of comparative costs and reciprocal demands, factor reward equalization, international tariffs and customs unions. [26L]

Exclusion: ECO328Y

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/227Y/STA242Y, 262Y

ECO365H International Monetary Economics

An analysis of the nature, effects and policy implications of international finance; balance-of-payments, and foreign exchange analysis; liquidity problems and topics related to current problems in international finance. [26L]

Exclusion: ECO328Y

Prerequisite: ECO200Y/206Y, 202Y/208Y, 220Y/227Y/STA242Y/262Y

ECO366H Principles of Industrial Organization

The allocative implications of market failure and the operation of oligopolistic and imperfectly competitive markets. Measures of industrial concentration and other dimensions of market structure; models of firm behaviour in different market settings; case studies of particular industries. [26L]

Exclusion: ECO310Y

Prerequisite: ECO200Y/206Y, 220Y/227Y/STA242Y/262Y

ECO367H Welfare Economics

The basic ideas of welfare economics – especially Pareto efficiency and the question of the significance of Pareto efficiency – will be examined. Then a few particular topics (such as the economic implications of property rights; consumer surplus; and compensation tests) will be studied more intensively. [26L]

Prerequisite: ECO200Y/206Y, 220Y/227Y/STA242Y/262Y

ECO368H Economics of Poverty

Economic influences on the extent of inequality and poverty in Canada will be examined. These will include aggregate income levels, unemployment, inflation, regional development, education, low wage employment and discrimination. Canadian policies that affect the incidence of poverty are evaluated, and proposed programmes are critically analyzed. [26L]

Exclusion: ECO340Y

Prerequisite: ECO200Y/206Y

ECO372H Game Theory and Economic Strategy

This course will develop the basic concept of non-cooperative games in extensive and normal form. The level of exposition will be comparable to the *Games and Decisions* by Luce and Raiffa. The emphasis will be on developing an intuitive grasp of the concepts and the relationship between these concepts and strategic situations encountered in economics and other contexts. [26L]

Prerequisite: ECO200Y/206Y, 220Y/227Y/
STA242Y/262Y

ECO420Y Reading Course, Seminar or Workshop

Primarily for advanced Specialist Students who have exhausted course offerings in a particular subject area. Open only when a faculty member is willing and available to supervise. Students must obtain the written approval of the Assistant Chairman before enrolling. [TBA]

Exclusion: ECO421H, 422H

ECO421H/422H Reading Course, Seminar or Workshop

Primarily for advanced Specialist students who have exhausted course offerings in a particular subject area. Open only when a faculty member is willing and available to supervise. Students must obtain the written approval of the Assistant Chairman before enrolling. [TBA]

Exclusion: ECO420Y

Faculty Advisor: Professor J. Dutka

The Department of English offers a wide range of courses. Whether an individual course provides a knowledge of one author or one genre or an entire period, its aim is to deepen the student's awareness and appreciation of a distinguished literary tradition.

Courses are arranged in four series. This gradation denotes the level of work expected in the classroom. Thus, courses in the 100 series are introductory; the 200 series provides courses at an intermediate level; and more advanced courses appear in the 300 and 400 series. (Students from outside the Faculty wishing to take English courses should consult the Associate Chairman of the Department.)

The 100 series courses are designed to introduce students to English studies at the university level and to develop their skills in critical reading and writing. The range of subject matter is broad, but all courses have certain aims and methods in common. Each course will encourage the close and careful reading of texts and provide an opportunity for students to develop their writing abilities. 100 series courses are open to all students with fewer than nine courses and to other students who have standing in no more than one course in English. The 200 series courses are divided into two types: those that are open to all students and those that are open to all students who have completed at least four full courses (see course descriptions below).

The 300 series courses are open to all students who have completed at least four full courses at least one of which must be in English. The 400 series courses are open to students who have completed at least nine full courses including three full courses in English.

The Specialist Programme outlined in Section 7 provides the student with the opportunity to become acquainted with a range of authors, periods, and critical approaches. The Specialist Programme is not designed especially for entrance into Graduate School; therefore, students contemplating further degrees should consult their instructors about graduate school requirements, including the customary language requirements. Similarly, students considering a teaching career in Ontario should consult the Faculty of Education about the requirements for Type A certification.

The student who desires information beyond what is set forth in this Calendar may obtain a brochure from the English office (Room 227, North Building) or from the Department of English on the St. George Campus (7 King's College Circle). This describes the content of courses in full detail and supplies lists of texts suggested by the individual instructors. Counselling is available from the Faculty Advisor as well as from other members of the English Faculty.

Please see Section 7 for details of Programme Requirement.

Programmes: English; English and History

NOTE: ENG102Y, 103Y, and 104Y are open to all students who have standing in fewer than nine full courses and to other students who have standing in no more than one course in English.

ENG102Y Introduction to English Studies

An introduction to basic literary skills, designed to teach the student to recognize the major literary forms and to develop a basic critical vocabulary. The course will focus on the reading, comprehension, and interpretation of texts, on how to write about them, and on the use of library resources and the development of bibliographical skills. Texts: A wide range of poems, plays, stories, and novels by 20th-century writers, which may be supplemented by additional forms and texts from other periods. [78L]

ENG103Y Effective Writing

(Formerly ENG100Y)

An introduction to the writing of prose, dealing with organization, style and usage, intended to improve individual writing skills and to develop a critical appreciation of different types of prose. [78L]

Exclusion: INE203H, 205H

NOTE: Admission to ENG103Y is conditional on passing a diagnostic writing test administered by the Department at the beginning of the course.

ENG104Y Backgrounds to English Literature

(Formerly ENG101Y)

An introduction to the study of literature through twelve major works that have contributed significantly to the form and development of English literature. Works by Homer; Aeschylus; Sophocles; Plato; Vergil; Ovid; Augustine; Dante; Shakespeare; the Bible; *Sir Gawain and the Green Knight*. [78L]

Offered in alternate years.

NOTE: ENG202Y to ENG237H are open to all students.

ENG202Y Major British Writers

(Formerly ENG112Y)

An historical and critical introduction to the study of British literature through a chronological consideration of the following: Chaucer, "Miller's Tale", "Pardoner's Tale"; *Second Shepherd's Play*; Spenser, *Faerie Queene*, BK1; Shakespeare, *Antony and Cleopatra*, selected sonnets; Donne, selected songs and sonnets; Milton, "Lycidas", *Paradise Lost*, Bks. I, II(1-485); Bunyan, *The Pilgrim's Progress*, selections from pt. 1; Dryden,

"Absalom and Achitophel"; Congreve, *The Way of the World*; Pope, "The Rape of the Lock"; "An Epistle to Dr. Arbuthnot"; Swift, *Gulliver's Travels*; Fielding, *Joseph Andrews*; Wordsworth, selections from *The Prelude* and other selected poems; Austen, *Emma*; Keats, "The Eve of St. Agnes" and selected odes; Dickens, *Great Expectations*; Browning, "My Last Duchess"; "The Bishop Orders his Tomb"; "Fra Lippo Lippi"; "an Epistle of Karshish" and other selected poems. [78L]

ENG213H The Short Story

(Formerly ENG265H)

An introduction to fiction through short stories of various kinds, written mainly in the 19th and 20th Centuries. Authors include Hawthorne, Poe, James, Conrad, Kipling, Joyce, Lawrence, Mansfield, Faulkner, Hemingway, Singer, Gallant. [39L]

ENG214H The Short Story Collection

(Formerly ENG295H)

A study of interrelated short story collections written and put together by such authors as Kipling, Joyce, Lawrence, Hemingway, Mansfield, Salinger, Roth, Laurence, Faulkner, O'Connor, and Gallant. [39L]

Offered in alternate years.

ENG215H The Canadian Short Story

(Formerly ENG277H(G))

A study of Canadian short fiction in English since its beginnings. A wide variety of regions, periods, styles, and writers will be considered. Works by authors such as Callaghan, Ross, Laurence, Gallant, Munro, Buckler, Hood, Hodgins, and Atwood will be included. [39L]

Offered in alternate years.

ENG216Y Modern Canadian Fiction

(Formerly ENG256Y)

A survey of the historical development and contemporary state of Canadian fiction in English. A minimum of fifteen works will be studied, including at least one by six of the following principal authors: Duncan, Leacock, Grove, Callaghan, MacLennan, Buckler, Lowry, Davies, Laurence, Richler, Munro, Atwood. A selection of short stories may be included. [78L]

Offered in alternate years.

ENG217H British Fiction Since 1960

(Formerly ENG225H)

At least six works by at least four contemporary British novelists, such as Beckett, Burgess, Fowles, Golding, Lessing, Spark, Thomas. [39L]

Offered in alternate years.

ENG218H American Fiction Since 1960

(Formerly ENG226H)

At least six works by at least four contemporary American novelists, such as Bellow, Doctorow, Hawkes, Mailer, Nabokov, Percy, Pynchon, Updike, Vonnegut. [39L]

Offered in alternate years.

ENG220Y Shakespeare

(Formerly ENG212Y)

Special study of not more than twelve plays by Shakespeare, including at least eight of the following: *Romeo and Juliet*; *A Midsummer Night's Dream*; *Richard II*; *Henry IV*, parts I and II; *Henry V*; *Twelfth Night*; *Measure for Measure*; *Hamlet*; *King Lear*; *Antony and Cleopatra*; *The Tempest*. [78L]

ENG224H Drama in English Since 1960

(Formerly ENG235H)

At least ten plays by at least six contemporary British and American dramatists, such as Pinter, Albee, Stoppard, Orton, Bond, Storey, Mercer, Griffiths, Shaffer, Shepard, Sackler, Terry. [39L]

Exclusion: ENG278H (1977-80)

Offered in alternate years.

ENG233Y Major Women Writers

(Formerly ENG275Y)

A study of at least five and not more than eight major women writers. The course will include works of poetry and fiction; drama and non-fiction may also be represented. [78L]

ENG234H Children's Literature

(Formerly ENG259H)

An historical and critical study of poetry, fiction and drama written for or appropriated by children. Works by Bunyan, Defoe, Stevenson, Carroll, Twain, Milne, Tolkien, Norton, Andersen, and at least three other authors. [39L]

ENG236H Detective Fiction

(Formerly ENG262H)

At least twelve works by such authors as Poe, Dickens, Collins, Doyle, Chesterton, Christie, Sayers, VanDine, Hammett, Chandler, Faulkner, P.D. James, Rendell. [39L]

ENG237H Science Fiction and Fantasy

(Formerly ENG263H)

At least twelve works by such authors as M. Shelley, Poe, Verne, Wells, Stapledon, Huxley, Orwell, Clarke, C.S. Lewis, G. Macdonald, Wyndham, Stoker, Le Guin, Hudson, Tolkien, Read. [39L]

Offered in alternate years.

NOTE: ENG250Y, 252Y, and 270Y are open to all students who have obtained standing in at least four full courses in the Faculty.

ENG250Y American Literature

An introductory survey of major works in American literature through the study of approximately twelve representative writers. Works to be studied include: Hawthorne, *The Scarlet Letter*; Melville, *Moby-Dick*; Thoreau, *Walden* or Emerson, selected writings; Twain, *Adventures of Huckleberry Finn*; selected poems by Whitman, novels by James and Faulkner; selected poems by one of Eliot, Frost, Stevens. [78L]

ENG252Y Canadian Literature in English

An introductory survey of Canadian poetry, prose, and drama, consisting of the work of at least twelve writers. At least one third of the material studied will date from before 1950, but attention will also be given to very recent work. The course will include works by at least eight of the following: Moodie, Lampman, Leacock, Pratt, Klein, Ross, Birney, Davies, Laurence, Reaney, Munro, Atwood. [78L]

ENG270Y History of Literary Criticism

An introduction to the work of the major figures in literary criticism from Plato to the mid-Twentieth Century. Topics to be discussed will include the evaluation and interpretation of literature, theories of the imagination, conceptions of genre and style, the social and historical context of literature. Among the authors will be five of the following: Plato, Aristotle, Sidney, Johnson, Coleridge, Arnold, Eliot, Woolf. [78L]

NOTE: 300 series courses are open to all students who have standing in at least four full courses, at least one of which must be in English. Note also the special pre-requisites for ENG369Y, 390Y, and 391Y.

ENG300Y Chaucer

(Formerly ENG312Y)

The Canterbury Tales; *Troilus and Criseyde*; selections from Chaucer's other works. [78L]

ENG302Y Poetry and Prose, 1500-1600

Poetry: Wyatt and Surrey, Sidney, Marlowe, Shakespeare, Spenser (including *The Faerie Queene*, Book I, at least two other Books, and the *Mutabilitie Cantos*), and Donne. Other poets may be added. Prose: More, *Utopia*; and Sidney, *Apology for Poetry*. Selections from at least two of: Elyot; Ascham; Hakluyt; Hooker; Lyly; Sidney, *Arcadia*; Nashe, and Deloney. Supplementary readings from such authors as Erasmus, Castiglione, Machiavelli, and Ariosto may be prescribed. [78L]

ENG304Y Poetry and Prose, 1600-1660

Poetry of Donne, Jonson, and their successors; Milton. Prose from writers of the period, e.g., Bacon, Browne, Burton, Milton, and Traherne. [78L]

Offered in alternate years.

ENG306Y Poetry and Prose 1660-1800

Special study of Dryden, Pope, Swift, and Johnson, supplemented with works by at least six of the following: Addison, Boswell, Burke, Burns, Butler, Collins, Cowper, Defoe, Finch, Gibbon, Goldsmith, Gray, Halifax, Pepys, Prior, Rochester, Smart, Steele, Thomson, Walpole, Wollstonecraft, Young. [78L]

Offered in alternate years.

ENG308Y Romantic Poetry and Prose

Poetry and critical prose of Blake, Wordsworth, Coleridge, Byron, Shelley, Keats; may include brief selections from other writers such as Crabbe, Scott, Landor, Clare. [78L]

ENG309Y Victorian Poetry

(Formerly ENG346Y)

Special study of Tennyson, Browning, and Arnold; selections from Fitzgerald, Clough, C. Rossetti, D.G. Rossetti, Morris, Swinburne, Hopkins, Meredith, Hardy, Housman, or others. Selections from the critical writings of the period.

Offered in alternate years.

ENG322Y Fiction Before 1832

At least twelve works, including one or more by each of Richardson, Fielding, Sterne, Austen, and Scott. Three of the works will be: Richardson, *Pamela* or *Clarissa*; Fielding, *Joseph Andrews* or *Tom Jones*; Sterne, *Tristram Shandy*. [78L]

ENG324Y Fiction, 1832-1900

At least twelve works, including one or more by each of Dickens, Thackeray, Trollope, Emily or Charlotte Brontë, George Eliot, and Hardy. [78L]

ENG328Y Fiction, 1900-1960

At least twelve works, including one or more by each of James, Conrad, Joyce, Lawrence, and Faulkner. [78L]

ENG332Y English Drama to 1642

The miracle play, the morality play, the Tudor interlude, early Tudor and Elizabethan tragedy, comedy and romance; two or more plays by Marlowe; Shakespeare, four and not more than seven of the following: *Love's Labour's Lost*, *Richard III*, *Much Ado About Nothing*, *As You Like It*, *Troilus and Cressida*, *Othello*, *Macbeth*, *King Lear*, *Coriolanus*, *The Winter's Tale*; two plays

by Jonson; and a selection of works by at least six other Jacobean dramatists. [78L]
Offered in alternate years.

ENG338Y Modern Drama

A minimum of twenty representative modern plays; one or more by at least five of Ibsen, Chekhov, Shaw, Synge, Yeats, O'Casey, O'Neill, Eliot, Beckett, Pinter. [78L]

Offered in alternate years.

ENG348Y Poetry, 1900-1960

Special study of Hopkins, Yeats, Pound, Eliot, Stevens; selections from other poets. [78L]

ENG358Y American Renaissance

Studies in nineteenth-century American literature focussing on writers of the American Renaissance. At least five authors from the following list will be studied: Emerson, Cooper, Poe, Stowe, Melville, Hawthorne, Thoreau, Fuller, Whitman, Dickinson, James. [78L]

Exclusion: ENG218Y, 317Y, 318Y, 319Y

Offered in alternate years.

ENG359Y Realism, Naturalism, and Modernism in American Literature

A study of major currents in American writing between 1890 and 1960, covering at least five authors such as James, Twain, Wharton, Dreiser, Dos Passos, Cather, Williams, Stein, Hemingway, Faulkner, Frost, Welty, Stevens, and Miller. [78L]

Exclusion: ENG218Y, 317Y, 318Y, 319Y

ENG366Y Theory and Criticism of Literature

Major issues and movements in the theory of literature and literary criticism, with emphasis on the Twentieth Century. Among the movements to be studied are varieties of formal, psychological, and moral criticism and theory, feminist criticism, structuralism and post-structuralism. Authors to be studied may include such figures as Richards, Leavis, Brooks, Frye, Trilling, Barthes, Bloom, Eagleton, Barbara Johnson. [78L]

Offered in alternate years.

ENG369Y Seminar in Writing

Restricted to students who in the opinion of the Department show special aptitude. [52S]

Prerequisite: Permission of Instructor

ENG390Y Individual Studies

A scholarly project chosen by the student and supervised by a member of staff. The form of the project and the manner of its execution will be determined in consultation with the supervisor. All project titles should be approved by the Associate Chairman before August 31, and none will

be accepted after September 15. Proposal forms are available in Room 227 (North Building). [TBA]

Prerequisite: Three courses in English

ENG391Y Individual Studies (Creative)

A project in creative writing chosen by the student and supervised by a member of the staff. The form of the project and the manner of its execution will be determined in consultation with the supervisor. All project titles should be approved by the Associate Chairman before August 31, and none will be accepted after September 15. Proposal forms are available in Room 227 (North Building). [TBA]

Prerequisite: Three courses in English, including ENG369Y

NOTE: 400 series courses are open to students with standing in at least nine full courses, including at least three in English. Students should consult the English Department Handbook, published in the Spring and available in Room 227 (North Building), for details.

ENG405H Studies in a Major Writer, Pre-1800
[26S]

ENG406H Studies in a Major Writer, Pre-1800
[26S]

ENG420H Studies in a Major Writer, Post-1800
[26S]

ENG421H Studies in a Major Writer, Post-1800
[26S]

ENG490Y Senior Essay
(Formerly ENG469Y)

A scholarly project chosen by the student and supervised by a member of the staff. All project titles should be approved by the Associate Chairman before August 31, and none will be accepted after September 15. Proposal forms are available in Room 227 (North Building). [TBA]
Prerequisite: Open only to students who have obtained standing in at least fourteen full courses, at least three of which must be in English.

Faculty Advisor: Professor L. Eleen

Since the study of works of painting, sculpture, architecture and the minor arts provides insight into the nature of the societies in which they were created, it is one of the ways of gaining understanding of human culture in general. The creative process leading to the making of a work of art is a subject worthy of study in its own right. Students of Art and Art History learn to comprehend and interpret this process through the practice of visual analysis and critical appraisal of extant literature. This field of study also complements related disciplines, such as history, philosophy and literature. Erindale College offers programmes in both Art History and Art and Art History. The student may work toward a specialization or major in Art History or in Studio. The latter requires a component of three core Art History courses. Specialization in Fine Art may lead to curatorial work in galleries, museums, corporations or teaching at the high school or university levels; careers in illustration and design, independent artistic activities or simply to the greater enjoyment of art. A joint specialization in Fine Art and Urban Studies is also available. Interested students should consult the Faculty Advisors in both of these Disciplines. Students registering in their first year in Fine Art and Art & Art History, are advised to meet the Discipline Representative and Studio Advisor during registration period for guidance. Most FAS courses are offered on the Sheridan Campus, Oakville. In order to be eligible for enrolment in a FAS course, students must apply and register in person at Sheridan College, Oakville Campus. Enrolment is limited in all studio courses; balloting is mandatory and should be completed on forms available from the Fine Art Office, Erindale or Registrar's Office, Sheridan prior to August 19, to guarantee considerations. See Section 7 for details of the programme requirements.

Counselling is available by appointment from:

Discipline Representative Erindale – Luba Eleen
(828-5285)

Undergraduate Secretary (FAH) St. George Campus – Philip Sohm (978-3290)

Studio advisor – (FAS) Sheridan College, Oakville Campus, Annie Smith (845-9430)

HISTORY OF ART (FAH)

FAH101Y Greek and Roman Art

The art of Greece and Rome. The importance of architecture and the arts as characteristic expressions of their age. Detailed study of the outstanding monuments. [78L]

FAH102Y Mediaeval Art and Architecture
A selective survey of the art of the Middle Ages. The study of Early Christian, Byzantine, and Early and Late Mediaeval art and architecture will be combined with a more general introduction to the language of visual expression and its interpretation. [52L, 26T]

FAH200Y European Art from 1400 to 1750
Major forms of expression in the visual arts—architecture, painting and sculpture—with special emphasis on visual analysis. Political, religious and general cultural movements. [52L, 26T]
Recommended preparation: FAH101Y/102Y

FAH210Y European Painting and Sculpture from Neo-classicism to 1940
A discussion of the major movements in European art. [52L]
Exclusion: FAH208H, 209H, 283H, 284H
Recommended preparation: FAH200Y

FAH211H Architecture in the Western World Since the Birth of Neo-Classicism
A survey of principal developments in the history of Western architecture since the mid-eighteenth century. [26L]
Recommended preparation: FAH200Y
Offered on the St. George Campus.

FAH256H Ancient Rome
Development of the city of Rome, from early times to the Late Empire. Buildings and monuments and their place in the life of the ancient city. Readings in topography, art and architecture, and history. [26L]
Offered in alternate years.

FAH258H Pompeii, Herculaneum and Ostia
The public and domestic monuments of three ancient Roman communities, illustrating the daily life of the later Republic and the Empire, outside the capital city itself. [26L]
Offered in alternate years.

FAH265H The Mediaeval City
A study of the medieval city, seen within its intellectual, social and political context. The course will concentrate on the ground plans and on the forms and uses of public buildings, religious and secular, and of domestic architecture.
Exclusion: FAH365H
Offered in alternate years.

FAH268H The Gothic Cathedral
The architecture and decoration of the Gothic cathedral. Origins, evolution, and variety of forms; methods of construction; religious and liturgical uses; symbolic meanings; its mediaeval, intellectual and social context. [26L]

FAH304Y Piero della Francesca and His Followers
An investigation into the sources and development of ideal space and forms in the paintings and writings of Piero della Francesca and his followers in Tuscany and Rome in the late 15th and early 16th centuries. [52S]
Prerequisite: FAH200Y
Recommended preparation: A reading knowledge of Italian or French
Offered in alternate years.

FAH312H Painting and Sculpture in the United States
These arts in America since the late 17th century: their relationship to European traditions, the growth of distinctive national styles, and international interaction. [26S]
Exclusion: FAH310Y
Prerequisite: FAH200Y/210Y/287H and P.I.
Offered in alternate years.

FAH313H Painting and Sculpture in Canada
These arts in Canada since the late 17th century: their relationship to European traditions, the growth of distinctive national styles, and international interaction. [26S]
Exclusion: FAH310Y
Prerequisite: FAH200Y/210Y/287H and P.I.
Offered in alternate years.

FAH315H Realism
An examination of this mid-nineteenth century movement in French painting and sculpture with particular emphasis on Courbet, Millet, the Barbizon School, Daumier and Manet. [26S]
Pre or Corequisite: FAH210Y/283H/301Y and P.I.
Recommended preparation: A reading knowledge of French
Offered in alternate years.

FAH318H Vincent Van Gogh and 19th Century European Painting
The role of this artist in relation to the Romantic, Realist, Impressionist, Neo-Impressionist and Symbolist movements in European painting. [26S]
Pre or Corequisite: FAH210Y/283H/301Y and P.I.
Recommended preparation: A reading knowledge of French, German or Dutch
Offered in alternate years.

FAH319H The Expressionist Tradition in Twentieth Century Painting and Sculpture
A continuation of FAH318H, the course concentrates upon such twentieth century masters as Matisse, Kirchner, Kandinsky, Nolde, Arp, Miro and Pollock, Borduas and Riopelle. [26S]
Pre or Corequisite: FAH210Y/283H/301Y and P.I.
Recommended preparation: A reading knowledge of French or German
Offered in alternate years.

FAH327H Giotto and Duccio

The position of these artists in the sequence of Italian painting, their masterworks in Padua, Florence and Siena seen in relation to the work of their predecessors and followers. [26S]

Exclusion: FAH326Y

Prerequisite: FAH102Y and P.I.

Recommended preparation: A reading knowledge of Italian or German

Offered in alternate years.

FAH328H Italian Mediaeval Sculpture

Selected topics in the history of Italian mediaeval sculpture, concentrating on the careers of the Emilian masters of the twelfth century and the Pisani in the thirteenth and early fourteenth. [26S]

Exclusion: FAH326Y

Prerequisite: FAH102Y and P.I.

Recommended preparation: A reading knowledge of Italian or German

Offered in alternate years.

FAH330Y Raphael and Michelangelo As Painters

An investigation of the late pictorial works of Raphael and Michelangelo which completed the decoration of the Sistine Chapel, and also of Michelangelo's Peter and Paul cycles in the adjacent Pauline Chapel. A study of High Renaissance Classicism. [52S]

Prerequisite: FAH200Y

Recommended preparation: A reading knowledge of Italian or German

Offered in alternate years.

FAH331H Fifteenth and Sixteenth Century Italian Sculpture

The development of Renaissance sculpture from Ghiberti to Michelangelo, with an emphasis on the works of Donatello and Michelangelo. The impact of the latter's achievement on the succeeding generation of Mannerist sculptors such as Cellini, Ammanati and Sansovino. [26S]

Prerequisite: FAH200Y

Recommended preparation: A reading knowledge of Italian or German

Offered in alternate years.

FAH332H Studies in Baroque Painting

Its origins in Northern Italian painting and its subsequent manifestation in the aesthetic of Caravaggio, Annibale Carracci and their followers throughout Europe. Seventeenth century academies of art will also be considered. [26S]

Prerequisite: FAH200Y

Recommended preparation: A reading knowledge of Italian or German

Offered in alternate years.

FAH338H Baroque Architecture in Italy

The origins and development of the Baroque style in architecture in the Italian peninsula, principally in Rome. [26S]

Prerequisite: FAH200Y

Recommended preparation: A reading knowledge of Italian

Offered in alternate years.

FAH365H The Mediaeval City

See FAH265H for a description. Students taking the course as a third year subject will attend the lectures, participate in an additional weekly class and write a special paper. [26L, 13T]

Exclusion: FAH265H

Prerequisite: FAH102Y and P.I.

Offered in alternate years.

FAH402H International Art Since 1940

Developments in the mainstream of Western painting and sculpture since World War II with special emphasis upon inter-relations among Europe, Canada and the United States. [26S]

Prerequisite: FAH210Y/286H/310Y/312H/313H and P.I.

Offered in alternate years.

FAH445H Portraiture from 1400-1750

Portraits of individuals of various social strata. Topics such as the social position of the artist as artisan or practitioner of the Liberal Arts; the aggrandizement of the prince and his dynasty in allegorical portraits; the female portrait as model of virtue, aesthetic and sex object; the male portrait as exemplar of leadership, image of impotency and self-doubt. [26S]

Prerequisite: FAH101Y/102Y/200Y

Recommended preparation: SOC101Y; knowledge of social history of the 15th-17th centuries; a reading knowledge of French, German or Italian

Offered in alternate years.

FAH446Y Art and Literature

Consideration of various types of illustrative art, including illustrated texts and history and genre painting, and, where appropriate, of the relationship of text to picture. The problems chosen for study will be selected from the late antique to the modern period. [52S]

Prerequisite: Any three Art History courses and P.I.

Offered in alternate years.

FAH447H Cubism and Related Movements

An investigation of the birth and development of Cubism, Futurism and Orphism in Europe, America and Canada. [26S]

Prerequisite: FAH210Y and P.I.

Recommended preparation: A reading knowledge of French or Italian

Offered in alternate years.

FAH480H/481H Studies in Ancient Art

Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the Undergraduate Secretary before registering.

Prerequisite: Six FAH courses and permission of Chairman or Undergraduate Secretary

FAH482H/483H Studies in Mediaeval Art

The same course description and prerequisites as FAH480H/481H.

FAH484H/485H Studies in Renaissance Art

The same course description and prerequisites as FAH480H/481H.

FAH486H/487H Studies in Baroque Art

The same course description and prerequisites as FAH480H/481H.

FAH488H/489H Studies in Modern Art

The same course description and prerequisites as FAH480H/481H.

Studio Advisor: Dr. Annie Smith

Most FAS courses are offered on the Oakville Campus, Sheridan College. In order to be eligible for enrolment in a Sheridan FAS course, students must apply to and register in person at Sheridan College, Oakville Campus. Enrolment is limited in all studio courses and the balloting is mandatory and should be completed on forms available from the Fine Art Office, Erindale or Registrar's Office, Sheridan prior to August 19, to guarantee consideration.

FAS143H Drawing I

An introduction to drawing media and techniques combining practice with analysis of draughtsmanship in stylistic and technical terms. [78P]

FAS145H Painting I

An exploration of painting's formal elements, subject matter and various media. [78P]

Exclusion: FAS230Y(G)

FAS146H Design I

Fundamental concepts and design processes developed through manipulation and analysis of specific problems. [78P]

FAS147H Photography I

Emphasis on interaction of technique, perception, and communication in making and responding to photographic images. Covers necessary technical aspects of the medium and darkroom procedures. [78P]

FAS232H Printmaking I

An introduction to all print media with an emphasis upon relief and intaglio processes requiring experimentation and exploration of contemporary visual concerns. [78P]

FAS234H Printmaking II

A continuation of FAS234H with more formal investigations in relief, intaglio lithography and silk-screen. [78P]

Prerequisite or Corequisite: FAS232H/P.I.

FAS243H Analytical Drawing

An analytical and compositional drawing course based on natural form, man-made objects, and the figure; contemporary studio problems viewed against classical drawing traditions and visual conventions. [78P]

Prerequisite: FAS143H/P.I.

FAS245H Painting II

A continuation of FAS145H: to further expertise in major painting media and to further exploration

of visual problems within the framework of 20th Century modes. [78P]
Exclusion: FAS230Y(G)
Prerequisite: FAS145H/P.I.

FAS246H Design II

A continuation of FAS146H: Problem solving activities encompassing the fundamental concepts of ratio and proportion are extended to include the heuristic, analogous and metaphoric aspects of the lateral thought process. [78P]
Prerequisite: FAS146H/P.I.

FAS247H Photography II

A continuation of FAS147H, this course further develops the use of the camera, light and light-sensitive materials for visual communication and personal expression. Investigations of historical and contemporary uses of the medium will emphasize both technical and aesthetic considerations. [78P]
Prerequisite: FAS147H/P.I.

FAS248H Three-Dimensional Materials

This course explores the application of three-dimensional concepts through direct manipulation of both contemporary and traditional materials. [78S]
Prerequisite: FAS146H/P.I.

FAS330Y Past and Present Techniques of Painting

A practical and theoretical investigation of past and present techniques in painting. Critiques and gallery visits will complement studio discipline. [156P]

Prerequisite: Any FAS200H series course or any FAH100Y series course/P.I.

FAS332Y Computers and Art

A studio introduction to the applications of computer graphics systems in the visual arts, including basic technical information and discussion of the aesthetic and social issues involved in making "Art" with computers. [156P]
Prerequisite: Any FAS200H series course or any FAH100Y course series, and P.I.

FAS334Y Printmaking III

A continuation of FAS234H. Greater focus upon individual development with attention to production, quality, and technical expertise. [156P]
Prerequisite: FAS234H/P.I.

FAS343Y Drawing III

A continuation of FAS243H; further development of graphic skill and concepts. Drawing may be considered an end in itself, a manifestation of an idea or concept, and preparation for work in another media. [156P]
Prerequisite: FAS243H/P.I.

FAS345Y Painting III

A continuation of FAS245H. Greater attention will be given to individual development in the perceptual and conceptual understanding of contemporary art. [156P]
Exclusion: FAS331Y(G)
Prerequisite: FAS245H/P.I.

FAS347Y Photography III

An applied course in more advanced photographic practice and thinking; traditional and alternate processes will be used to further explore the documentary and expressive content of still photography. [156P]
Prerequisite: FAS247H/P.I.

FAS348Y Sculpture

An exploration of contemporary concepts, images and materials in three-dimensional works derived from both natural forms and man's intellectually imposed order on space. Students will be required to render three-dimensional works in a variety of materials. [156P]
Prerequisite: FAS248H/P.I.

FAS434Y Individual Investigations in Printmaking

Students must present both written and oral proposals for their term studies. The final submission and evaluation shall consist of a portfolio and/or exhibition of original prints, test experiments, and evidence of research resulting from the students' investigations. [156P]
Prerequisite: FAS334Y and P.I.

FAS445Y Individual Investigations in Painting

A proposal of the specific area of research, including a list of ongoing professional liaison activities, bibliography, complementary studies and objectives. [156P]
Prerequisite: FAS345Y, and P.I.

FAS447Y Individual Investigations in Photography

Advanced Photography: Proposals for term work must be presented in both written and oral forms. Emphasis upon student initiative and investigation leading to a final evaluation of the portfolio or original prints, test experiments, and evidence of research. [156P]
Prerequisite: FAS347Y and P.I.

FAS448Y Individual Investigations in Sculpture

The student explores and executes significantly personalized statements reflecting contemporary and projected directions of three-dimensional works. Students must present both written and oral proposals to establish criteria and parameters within which the work will be evaluated. [156P]
Prerequisite: FAS348Y, P.I.

Faculty Advisor: Professor M.-P. Ducretet

The impact of French culture on the world as we know it has been profound and lasting. Indeed, no understanding of European and North American patterns of thought is complete without a prior understanding of the contributions made to those patterns by Francophones on both sides of the Atlantic. The French programme at Erindale College offers students a wide range of courses designed to provide the basis for the study of our French heritage.

For students wishing to pursue a programme leading to a high level of competence in French, we offer two series of language courses (FRE121Y, 161Y, 261Y, 361Y, for non-specialists; FRE150Y/161Y/171Y, 271Y, 301H, 371Y, 380H, 381H for specialists) using modern methods and maximizing contact with instructors. Native speakers of French are not permitted to take for credit FRE161Y, 171Y, 261Y, 271Y, 361Y, 380H, 381H. Such students, however, will be admitted to any course for which FRE161Y/171Y is a prerequisite.

For those wishing a full programme of French Studies, our introductory and upper-year offerings in linguistics and literature completely satisfy the requirements for specialist or major certification in French Language and Literature and major certification in French Language and Linguistics. These offerings comprise a variety of fields: French as a language system (including Business French); critical approaches to literature (including computerized text analysis); and the study of both French and Quebecois literatures.

Note: Completion of at least 3 courses in the specialist programme and an average of 70% in 2 of the 3 courses, may entitle a student to participate in third year in the Study Elsewhere Programme at Aix-en-Provence. Information concerning the Diploma Programme in Translation may be obtained from Woodsworth College at 978-8713.

The series FRE161Y, 261Y, 361Y, which may constitute a minor programme, is intended to provide instruction for students specializing in other disciplines who wish to develop a practical knowledge of French. The series emphasizes self-help beyond the limits of the individual courses.

Please see Section 7 for details of Programme Requirement.

NOTE: Students who are not specializing or majoring in French may be admitted to French courses in Literature and Linguistics, with permission of the Department, if they demonstrate the appropriate level of competence in French. Students

seeking admission to FRE121Y will be required to provide a high school record as evidence of their level in French. Particularly well-qualified students may, as the result of a language proficiency test, be permitted to enrol in 200 level language courses. Native speakers of French are excluded from 100 level language practice courses, and from FRE261Y, 271Y, 361Y, 380H, 381H.

FRE121Y Introductory French II

Spoken and written French, reinforcing oral/aural competence, reading comprehension, and writing skills. [78S, 26P]

Exclusion: Not open to native speakers of French, nor to students with standing in Grade 13 French.

Prerequisite: FRE101Y, or some background in secondary school French

FRE150Y Introduction to French Literature

An introduction to the study of French literature through a consideration of works by major authors from the Middle Ages. This course is a useful background for upper-level literature courses and is strongly recommended for both specialists and non-specialists. [52L, 26T]

Exclusion: FRE151Y

Prerequisite: FRE121Y/Grade 13 French

FRE151Y Introduction to French Literature

An alternative to FRE150Y in which students write assignments and examinations in English. This course may not count for a Specialist or Major Programme in French.

Exclusion: FRE150Y

Prerequisite: Grade 13 French

FRE161Y Practical French I

For students who wish to maintain and improve their general knowledge of French. Emphasis will be placed on skills of comprehension, expression, and self-instruction. [78S]

Exclusion: FRE171Y

Not open to native speakers of French or 'immersion' graduates.

Prerequisite: FRE121Y/Grade 13 French

FRE171Y Language Practice I

A systematic study of grammar, vocabulary, composition and pronunciation. One hour of oral per week. Particularly recommended for students who intend to specialize or major in French. [78S, 26P]

Exclusion: FRE161Y.

Not open to native speakers of French or 'immersion' graduates.

Prerequisite: FRE121Y/Grade 13 French

FRE210Y Introduction to Québec Literature

An introduction to the study of Québec literature (novel, drama, poetry) from its origins to 1960, with special consideration to the historical, cultural and literary background. Particularly recommended as a first course on Québec literature. [26L, 26T]

Exclusion: FRE230Y, 419H(G)

Prerequisite: FRE150Y/161Y/171Y

Offered in alternate years.

FRE220Y The Literature of Classicism

Major writers of the seventeenth century, with emphasis upon the aesthetic and moral characteristics which constitute "classicism". [26L, 26T]

Prerequisite: FRE150Y/161Y/171Y

Offered in alternate years.

FRE224Y The Literature of Romanticism

French Romantic poetry, novels and plays of the eighteenth and nineteenth centuries. Origins of the movement and its later manifestations. [26L, 26T]

Prerequisite: FRE150Y/161Y/171Y

Offered in alternate years.

FRE225H Computer Applications in French

For students who wish to familiarize themselves with the use of computers for text analysis in literature and linguistics. [13L, 13T]

Prerequisite: FRE150Y/161Y/171Y/P.I.

Offered in alternate years.

FRE240Y An Introduction to Literary Methodology (Formerly FRE140Y)

Techniques of literary criticism and analysis, based on a detailed study of French and Québec works selected from novels, drama and poetry of the nineteenth and twentieth centuries. [52L, 26T]

Exclusion: FRE140Y

Prerequisites: FRE150Y/161Y/171Y or Departmental permission

FRE258H Women and Literature

The relationship between women, society and literature, stressing the historical and ideological background of literary works: novels, essays, plays and poetry. Focus on different periods and national traditions: French, Québécois, African or Caribbean. [13L, 13T]

Prerequisite: FRE150Y/161Y/171Y

FRE261Y Practical French II

For students who wish to maintain and improve their general knowledge of French while specializing in other fields of study. Emphasis will be placed on the skills of comprehension, oral and

written expression, and self-instruction (news-papers, radio, television, theatre). [78S]

Exclusion: FRE271Y.

Not open to native speakers of French

Prerequisite: FRE150Y/161Y/171Y

FRE271Y Language Practice II

A course designed to further improve the student's competence in written and oral French. [78S, 26P]

Exclusion: FRE261Y.

Not open to native speakers of French

Prerequisite: FRE150Y/161Y/171Y

FRE272Y The Structure of Modern French: An Introduction

The phonological, morphological and syntactical systems of modern French. [26L, 26T]

Prerequisite: FRE150Y/161Y/171Y

FRE273Y General History of the French Language

The changes by which the Latin spoken in northern Gaul became today's French. Phonetic, morphological, syntactic and semantic evolution; regional, dialectal and social variations; the question of French in Canada; attitudes of men of letters (writers, grammarians, and scholars); political and social history. [26L, 26T]

Prerequisite: FRE150Y/161Y/171Y

Offered in alternate years.

FRE301H Business French

A study of vocabulary, grammar and writing techniques involved in business situations (e.g., economics, industrial relations, law, marketing). [39L]

Prerequisite: FRE261Y/271Y

FRE310Y Québec Novel from 1960

A critical study of major texts using various critical approaches. [26L, 26T]

Exclusion: FRE333Y

Prerequisite: One 200 series FRE "Specialist" course

Offered in alternate years.

FRE322Y The Literature of the Enlightenment

The revolution in social, political, religious and intellectual values which characterized the literature of the 18th century. [26L, 26T]

Prerequisite: One 200-series FRE "Specialist" course

Offered in alternate years.

FRE358Y French Theatre from 1900

A critical and theoretical study of twentieth century theatre stressing the ways in which various play-

wrights have experimented with language and representation for the stage. [26L, 26T]

Exclusion: FRE354Y, 423H

Prerequisite: One 200 series FRE "Specialist" course

Offered in alternate years.

FRE361Y Practical French III

For students who wish to maintain and improve their general knowledge of French while specializing in other fields of study. Emphasis will be placed on the skills of comprehension, oral and written expression, and self-instruction (news-papers, radio, television, theatre). [78S]

Exclusion: FRE371Y/380H/381H.

Not open to native speakers of French

Prerequisite: FRE261Y/271Y

FRE364Y Prose Fiction from 1800 to 1900

The ways in which such writers as Balzac, Stendhal, Flaubert, Maupassant and Zola developed the techniques of the novel while exploring such themes as ambition, alienation and class struggle. [26L, 26T]

Prerequisite: One 200 series FRE "Specialist" course

Offered in alternate years.

FRE375Y Comparative Stylistics

A comparative study of the characteristics of French and English expression and how they pertain to the problems of translation. [26P, 26T]

Prerequisite: One 200 series FRE "Specialist" course

FRE376H French Phonology and Phonetics

Fundamental notions related to the characteristics of the phonetic and phonological systems of modern French. [13L, 13T]

Prerequisite: FRE272Y/277Y

Offered in alternate years.

FRE378H French Syntax

Various modern approaches to syntax. [13L, 13T]

Prerequisite: One 200 series FRE "Specialist" course

Offered in alternate years.

FRE380H Language Practice III : Written

This course will focus on written French, strengthening and refining the competence that the student has previously acquired. Strongly recommended for students who have completed FRE271Y with less than 67% on the final written examination. [39S]

Exclusion: FRE361Y/371Y.

Not open to native speakers of French

Prerequisite: FRE271Y and the permission of the Department

FRE381H Language Practice III : Oral

This course will focus on oral French, strengthening and refining the competence that the student has previously acquired. Strongly recommended for students who have completed FRE271Y with less than 67% on the final oral examination. [39S]

Exclusion: FRE361Y/371Y.

Not open to native speakers of French

Prerequisite: FRE271Y and the permission of the Department

FRE426Y Prose Fiction from 1900

The ways in which twentieth century writers have explored the diverse spiritual, intellectual and psychological conflicts of their society while refining traditional forms of the novel and promoting innovative approaches to the problems of narration and representation. [26L, 26T]

Exclusion: FRE366Y, 424H

Prerequisite: Two 200(series FRE "Specialist" courses

Offered in alternate years.

FRE490Y Senior Essay

A senior essay is an independent research project on either a literary or linguistic topic to be proposed by the student and supervised by an instructor. [TBA]

Prerequisite: Permission of the Department

FRE491H Independent Study

Individual study supervised by a member of staff on a literary or linguistic topic of common interest including readings, discussions and papers. [TBA]

Prerequisite: Permission of the Department

Faculty Advisors: Professors G.H.K. Gad, C.J. Houston, S.H. Luk

Geography seeks to understand the processes which have brought about current use of the environment and the patterns of human settlement. Its traditional focus is on integrating the viewpoints of science, social science and humanities. Geography draws on the earth sciences to understand processes that lead to distinctive variations or similarities from place to place in the physical environment. It also draws on the social sciences and humanities in order to understand the way human beings create and organize distinctive regions, economies and landscapes.

By combining their interest in physical and human processes, geographers have a unique role in studying the physical basis of environmental deterioration and in developing policy alternatives for dealing with such deterioration. In general, in a world where the demand for specialists fluctuates widely from year to year, the integrative qualities of a geographical education remain.

At Erindale, the geography curriculum has been designed to stress the integrative nature of the discipline. Students proceed through a sequence of courses of increasing difficulty, reinforcing and building on knowledge developed at previous stages. They are expected to demonstrate high levels of verbal, numerical, statistical and graphical skills. They are required to take systematic courses in both physical and human geography and to develop an appreciation of the environmental and human issues facing Canada as we approach the twenty-first century.

The geography curriculum also places considerable stress on experiential learning. Field studies are an important component of the programmes at all levels and in all areas of the curriculum. They complement lectures, provide material for workshops, develop skills in geographical methods, encourage student involvement in basic enquiry, and build student-staff cooperation. Field work takes place on the College grounds, in the metropolitan area nearby, and further afield in rural Ontario. The demands of field studies have taken students and staff to Vancouver, Montreal, the tundra of Iceland and the medieval cities of Europe.

Geography offers a three year (15 course) Major and a four year (20 course) Specialist degree. (For degree regulations see section 5 of this calendar.)

Geography has close links with other disciplines and interdisciplinary programmes, and students in other disciplines should find many courses within Geography that complement their interests and expertise. Students with programmes in fields from literature to geology, from chemistry to history, or from fine art to economics may find

in geography new ways of combining and developing their knowledge. A Geography Handbook is available for detailed description of programmes.

In addition to JBG230Y, the following geography courses are counted as Natural Science courses: GGR117Y, 201H, 202H, 205H, 206H, 207H, 212H, 214H, 276H, 280H, 300H, 303H, 304H, 307H, 312H, 313H, 316H, 335H, 374H, 376H, 377H, 379H, 381H, 491Y.

Please see Section 7 for details of Programme Requirements.

GGR117Y Introduction to Geography

Geographical analysis of the physical environment. Climate, hydrology, geomorphology and biogeography are examined in terms of their relevance to human activity. The human impact on the natural environment is a major theme. [52L, 26P]

Exclusion: GGR 100Y, 131Y

GGR201H Geomorphology

This course will discuss glacial processes and landforms with special reference to Ontario. Other topics including weathering, slopes, and fluvial geomorphology will also be introduced. Field trips required. [26L, 13P]

Prerequisite: GGR100Y/JBG230Y

GGR202H (I) Statistics

Acquaints beginning students with the fundamentals of statistics. The course discusses statistical procedures for describing large quantities of data and for making inferences about populations on the basis of samples. [26L, 13P]

Exclusion: Any concurrent or previous Statistics course

GGR205H Soil Geography

The physical and chemical properties of soils; processes of soil formation; factors of soil formation; systems of soil classification; field and laboratory tests of soil properties. [26L, 13P]

Prerequisite: GGR100Y/JBG230Y

Recommended preparation: Grade 12 or Grade 13 Chemistry

GGR206H Introduction to Hydrology

Theoretical and practical aspects of surface and groundwater hydrology, together with the consideration of problems in water resource development. Measurement of streamflow, hydrograph analysis, physics of groundwater flow, snowmelt-runoff relationships, and urban hydrology. [26L, 13P]

Prerequisite: GGR100Y/JBG230Y

GGR207H Aerial Photo Interpretation

The aim of the course is to teach students to extract, interpret and apply the vast quantities of information present on an air photograph. Considerable attention also is given to presentation of aerial photographic information in mapped form. Students are reminded that GGR202H, GGR212H and GGR207H are a group of related courses and are required for the specialist degree in geography. [26L, 13P]

Prerequisite: GGR280H

GGR212H (I) Application of Statistics

A continuation of GGR202H including an introduction to non-parametric, analysis of variance and linear regression techniques. Students interested in taking this course should consider carefully the courses listed below as exclusions and choose the appropriate sequence after discussion with faculty members. [26L, 13P]

Exclusion: STA212H, 222Y(G), 242Y, 252Y(G), PSY201H, ECO220Y, BIO361H, SOC201Y

Prerequisite: GGR202H

GGR214H Climatology

Meteorological basis of climate; general circulation of the atmosphere and influence on climatic change; interaction between man and climate. Instruments and measurement techniques are examined in laboratory sessions. [26L, 13P]

Exclusion: GGR203H

Prerequisite: GGR100Y/JBG230Y

Recommended preparation: Grade 13 Mathematics

GGR220Y Regional Economic Models

An introduction to location, structure and interaction. Use of location theory in explaining industrial and agricultural patterns, transport networks and flow systems, regional economic development. [52L, 26T]

JBG230Y (I) Man and Environment

Past and present man-environment relationships are examined; principles of ecology, environmental ethics and esthetics are outlined; crucial alternatives for man are discussed. Problems of current environmental concern – land use, material and energy resources, pollution are considered and illustrated by case studies from different parts of the world. Given by the Departments of Biology and Geography. This course complements GGR233Y. [52L, 26T]

Exclusion: JBG130Y

GGR233Y Energy, Natural Resource and Environmental Management

Concepts in the management and decision-making process which shape the environment. Environmental quality, impact of technology on

society and nature, and evaluation of alternatives. The course is future-oriented, concerned with public policy, and adopts a world-view from a Canadian standpoint. This course complements JBG230Y. [52L, 26T]

Prerequisite: Any 4 full course credits

GGR245Y (I) Urban Canada

An introduction to urban studies through an examination of the development and character of the urban fabric and urban life in Canada. [52L, 26T]

GGR253Y Cultural Geography

Social change and the resultant imprint on both urban and rural landscapes in preindustrial and modern societies. Special emphasis on the Ontario cultural landscape. [52L, 26T]

Prerequisite: Any 4 full course credits

GGR255H Perspectives On Current Population Issues

Current discussions on the "population problem" are examined in light of historical writings. Optimum population size and political strength and the tradition of pessimism in population theory. [26L, 13P]

Prerequisite: Any 4 full course credits

GGR263H Historical Geography of Ontario

Ontario from its founding to the early 20th century: settlement and ethnic roots, agriculture, transport, industrial growth and urbanization. The cultural landscape and regional literature will receive attention. Field trip. [26L, 13T]

Exclusion: GGR351Y

Prerequisite: at least 4 full course credits

GGR276H Introduction to Data Processing in Geography

Practical instruction in the use of computers to solve geographical problems. An introduction to programming in a general purpose language e.g. Fortran and a special purpose language. [26L, 13P]

GGR280H Cartography

The use of maps and techniques of map making: topics include map interpretation, elements of cartographic design and mapping statistics. The aim of the course is to permit students to develop an areal or spatial perspective which they may bring to their studies in geography. [13L, 26P]

GGR300H Field Studies

Investigation of physical and socio-economic phenomena out-of-doors. Field observations and samples collected during a week-long field camp

are analysed and the findings are submitted in a series of reports. Each student must pay the cost of transportation and accommodation. [39P]
Prerequisite: Any 8 or more course credits

GGR304H Climate Near the Ground
Elements of microclimatology as they apply to the environment of plants and animals. The role of the surface in controlling energy and water exchange within bioclimatic systems will be emphasized. The movement of contaminants will also be discussed.

Prerequisite: GGR206H/214H, 276H
Offered in alternate years.

GGR307H Soil Management
Application of soil geography to problems of resource use and management. Soil erosion processes and conservation techniques. Soil water management. Drainage and reclamation of wetland soils. Soil pollution issues. Soil capability classification. Selected problems of soils in arid and semi-arid regions, the humid tropics, as well as the Arctic and sub-Arctic. [26L, 13P]
Prerequisite: GGR205H
Recommended preparation: GGR276H
Offered in alternate years.

GGR312H Permafrost Environment
Study of physical geography in permafrost areas. Topics include: formation and distribution of permafrost; ground ice; geomorphological processes; hydrology; terrain disturbance; problems of construction and resource development. [26L, 13P]
Prerequisite: GGR201H/206H
Recommended preparation: Grade 13 Mathematics, GGR276H
Offered in alternate years.

GGR313H Arctic Hydrology
Hydrological processes in Arctic areas. Topics involve all aspects of the hydrologic cycle including: snowmelt processes, water movement in frozen ground, nival runoff regime, ground ice formation and frost heave. [26L, 13P].
Prerequisite: GGR206H
Recommended preparation: GGR276H
Offered in alternate years.

GGR316H Hillslope Geomorphology
Systems approach to hillslope geomorphology studies; processes of erosion and deposition; mass wasting; slope forms of humid and arid regions; process-response models; applied aspects. [26L, 13P,]
Prerequisite: GGR201H
Recommended preparation: Grade 13 Mathematics, GGR276H
Offered in alternate years.

GGR324H Geography of Urban and Regional Transportation
Principles of transport and land use; characteristics of transportation networks and movements; transportation and economic development, past and present: geographical aspects of contemporary transportation problems. [26L, 13T]
Prerequisite: GGR202H

GGR325H Spatial and Locational Theory
Modern theoretical geography, spatial economics, and regional science. Analysis of spatial form, transport process, land use theory, locational analysis, central place theory, human movement in geographical space. Planning and policy questions. [26L]
Recommended preparation: GGR220Y
Offered in alternate years.

GGR330Y Rural Land Use
Agricultural origins, agricultural ecology and the economic development of agricultural patterns; the concept of agricultural region and distribution of agricultural types. [52L, 26P]
Prerequisite: One GGR course
Offered in alternate years.

GGR333H Geography of Energy in Canada
Regional supply/demand pattern; production and delivery systems; available supplies; end uses and efficiencies; major proposed energy projects. [26L, 13T]
Recommended preparation: GGR220Y/233Y/361Y
Offered in alternate years.

GGR334H Water Resources Management
Canadian problems in water resource management; a selection of topics related to policy will be covered, e.g. forecasting the demand for water, inter-basin and inter-national water transfers, industrial and urban water supply and wastewater management, flood/drought as natural hazards, the Great Lakes, water supply in developing countries. [26L, 13T]
Recommended preparation: GGR233Y
Offered in alternate years.

GGR335H Environmental Modelling
An application of environmental models to contemporary problems of decision-making. The course will demonstrate the relevance of techniques of data management (statistics, computer systems) to issues facing Canada and the global community. [26L, 13P,]
Prerequisite: Any 8 full course equivalents, including GGR202H/(a course in STA)
Corequisite: GGR276H

GGR339H Urban Geography and Political Processes

The spatial bases of political power and the allocation of benefits from the public purse with a Canadian urban focus. Urban landscape and public policy. The distribution of urban activities in space; public institutions and policies; impact of legislation on the spatial distribution of urban phenomena. [26L, 13T]

Recommended preparation: GGR245Y/220Y

Offered in alternate years.

JGS340Y Concepts, Methods and Values in Urban Studies

Designed for students concentrating in urban studies irrespective of major disciplinary area. A survey of a variety of types of urban study from the social science perspective. Linkages between the ways in which urban phenomena and processes are conceptualized, the methods employed to study them and the often implicit system of values in which such investigations are framed.

Urban researchers, both academic and applied, will be invited to discuss their research in the context of these issues. Given by the Departments of Geography and Sociology. [52L]

Prerequisite: SOC101Y/216Y, SOC205Y/

GGR245Y, SOC200Y/201Y/ (GGR202H, 207H, 280H)

GGR344Y Geography of the Soviet Union

A survey of the geography of the Soviet Union, through an examination of topics ranging from the territorial expansion of the Russian state to contemporary issues in planning and development. Comparison of Soviet conditions with more familiar North American situations. [26L, 13T]

Prerequisite: Two GGR courses

GGR346H The Urban Planning Process In Canada

Introduction to planning as a conscious collective activity which can or actually does shape the city. Reflection upon the nature of urban planning, rather than discussion of particular urban development issues is emphasized. Major themes: the legal framework of planning in Ontario, outline of planning history, current issues in planning theory. The course may include one week-long internship in a planning office. [26L, 13T]

Prerequisite: GGR245Y/SOC205Y

GGR349H Workshop in Advanced Urban Geography

(Formerly GGR349Y)

This course emphasizes research and field work related to housing and the residential environment. It will contain a mixture of lectures, seminar discussions and independent work. Research

topics will be selected according to current interests of students and staff. [26L, 13T]

Exclusion: GGR349Y

Prerequisite: GGR357H

GGR353H History of the Canadian Environment

For more than four centuries Canadian territory has been the subject of use and abuse by mankind. This course deals with the exploitation of natural and cultural resources from prehistoric times, with major emphasis on the consequences of technological innovation after 1800 and the growth of the conservation movement. [26L, 13T]

Prerequisite: Any 8 full course equivalents

Offered in alternate years.

GGR355H Environmental Change

Identification of man-induced and natural change in environmental systems with special reference to climatic variation. Specific cases of change, e.g. desertification along margins of deserts, availability and quality of water resources. [26L, 13T]

Recommended preparation: JBG230Y/GGR233Y

GGR357H Geography of Housing and Housing Policy

An introduction to housing as both product and process. The analysis of housing markets in a spatial context, emphasizing the transaction mechanism, residential location and housing choice, the role of the state, public housing and the relationships of housing changes to patterns of mobility and neighbourhood change. Case studies of specific policy issues and alternative housing strategies. [26L, 13T]

Prerequisite: GGR245Y

GGR363H Transportation and the Seas

The relationship of mankind to the oceans, from ancient to modern times: exploration, trade, migration, technology, oceanic resources, ports, coastal land use, and sovereignty. The seas in lore and literature. [26L, 13T]

Exclusion: GGR351Y

Prerequisite: At least 8 full course equivalents

GGR364H Historical Geography of Ethnic Groups in Canada

The creation and survival of ethnic communities in Canada with particular emphasis on rural settlements. Aspects of ethnic territoriality, the stability of ethnic communities, and the adaptation of immigrants to the Canadian environment. [26L, 13T]

GGR374H Water Quality

An introduction to the physical and chemical characteristics of natural water with emphasis on

their importance to industrial and domestic supplies. Topics included are: measurement and analysis of dissolved and suspended constituents, chemical equilibrium in dilute aqueous solutions, and spatial variability of water quality with emphasis on Southern Ontario. [26L, 13P]

Prerequisite: Grade 13 Chemistry/CHM135Y/150Y, GGR206H

Offered in alternate years.

GGR376H Groundwater Hydrology

An introduction to the principles of groundwater flow with emphasis on their application to the development of groundwater supplies, construction dewatering, and contaminant migration. The main components of the course are: theory of groundwater flow, well drilling procedures and construction, data collection and evaluation, groundwater chemistry, groundwater assessment procedures, dewatering system design, and simple groundwater models. [26L, 13P]

Prerequisite: Grade 13 Chemistry/CHM135Y/150Y, GGR206H

Offered in alternate years.

GGR377H Environmental Monitoring

Techniques of point measurement of environmental parameters are examined with particular emphasis on air and water pollution. Problems of sampling in time and space are subsequently treated with a view to designing pollution indices. Applications to human health, government policy and industrial activity are noted. [26L, 13P]

Prerequisite: JBG230Y/one full course equivalent from GGR201H, 202H, 206H, 207H, 214H

Recommended preparation: GGR276H
Offered in alternate years.

GGR379H Advanced Field Methods in Physical Geography

Structured around field work, the course will include at least one major field trip. Students will be responsible for reading selected articles relating to the study areas prior to visiting the field. Projects will involve mapping of physical features (i.e., geologic structures, vegetation, soil, water) on a preliminary basis from aerial photographs in the laboratory and subsequently in the field. The intention is to conduct the major field trip outside Southern Ontario to provide a contrasting environment for the students (who, it is assumed, already have some familiarity with the local area). [39P]

Prerequisite: Any 3 courses drawn from one or more of the following: Physical Geography, Geology and Biology

Offered in alternate years.

GGR381H Research Design

Designed to give students experience in the definition of and proper approach to a research study. Sampling schemes, analytical procedures, and thesis or report formats are also covered. Students prepare a paper on the research problem which they would intend to pursue in fourth year. In addition to the statement of purpose, the paper embodies a thorough review of pertinent literature and where appropriate, data from interviews with experts in the field, personal observations and/or preliminary sample analyses. [26P]

Prerequisite: Any 10 or more course credits

GGR389H Advanced Field Studies in Human Geography

This course involves students in advanced methods of field work in human geography. Emphasis is placed on the integration and interpretation of documentary evidence (historical and archaeological) with the physical evidence in the field, including the interpretation of landscape change. A one week field camp in a North American locale is required. [39P]

Prerequisite: GGR280H

Offered in alternate years.

GGR441H Advanced Topics in Urban Studies

An advanced seminar dealing with topics in urban studies, to be selected according to staff and student interests. Topics include images of cities and the spirit of place, the city in history, social theory and the city. [26P]

Prerequisite: 15 or more full course credits

GGR491Y B.A./B.Sc. Thesis

A research project, each student working on a topic of his choice under the individual guidance of a member of the staff. Copies of the thesis are to be submitted by March 1, and the student will present it before an examining committee. Prerequisite: GGR381H, 6 GGR courses, 15 or more full course credits

Exclusion: All other courses in independent research

JBG491Y Environmental Research Project

Independent research on an environmental topic carried out under the supervision of a staff member whose written consent is required for registration. This project course is open to third and fourth year students. A written report of the research will be required and a seminar presentation may be required.

Exclusion: All other courses in independent research

Faculty Advisor: Professor C. Saas

For more than two hundred years Germany, Austria, and German-speaking Switzerland have played increasingly important roles in European life, both as leaders in commerce and industry and as the homelands of outstanding musicians, philosophers, scientists, psychologists, and religious and political thinkers. Their scholars have excelled in such fields as Religious Studies, Mediaeval Studies, Philosophy, Literary Studies, Classics, Archaeology, History of Art and Music, Physics, Chemistry and Mathematics.

German writers are equally distinguished. Beginning with a vigorous medieval literature and continuing through Lessing, Goethe, and Heine to Kafka, Thomas Mann, and Brecht, German literature has treated the widest possible range of human problems: philosophical and psychological, moral and religious, social and economic. University courses in German offer a thorough study of the more important authors from the Middle Ages to modern times.

The Department also offers a variety of language practice courses taught primarily in German on the intermediate and advanced levels, including grammar, translation, conversation, essay-writing, stylistics, and laboratory work. Two courses deal with the history and structure of the language.

To consolidate language learning and improve oral fluency the Department co-operates with the German Government whenever possible in sponsoring flights to Germany and summer work for a limited number of undergraduates.

As one of the major languages in a shrinking world, German is valuable in itself as a means of communication. It is particularly useful in careers such as the foreign service, customs and immigration, business and commerce, civil service, interpretation and translation, librarianship, radio and television, music, tourism, and of course teaching. A knowledge of German is a virtual necessity for specialists in certain disciplines, such as Music, Fine Arts, Classics, Theology, and Philosophy. As a literature, German may be studied alone or in combination with other languages and literatures, with Linguistics, Philosophy, or History. The successful completion of a four-year programme, including seven approved courses in German, may entitle a student to do work in the Graduate Division of the Department.

The Department prefers that students come to the university with Grade 13 German. However, since not all high schools offer this program, an introductory course in German is available for students with little or no previous knowledge of the language. Upon completion of this course (GER100Y or 101H) students enter the regular stream of study. In addition, courses are available at the beginning and intermediate level in Reading

German (GER105Y/205Y) for students in departments or faculties requiring a knowledge of scholarly German. Students who desire information regarding German studies are advised to confer with Professor C. Saas (828-5273). It is recommended that students who wish to specialize in German also take CLA261Y in First or Second Year.

Please see Section 7 for details of Programme Requirement.

GER100Y Introductory German

An intensive language course for students with no previous knowledge of German. Practice in comprehension, reading, writing and speaking. [130P] Exclusion: Grade 13 German/GER101H/105Y

GER101H Introductory German: Continuation

An intensive language course for students who have studied some German, but who have not yet attained Grade 13 level. Practice in comprehension, speaking, reading, and writing. This course is the spring term of GER100Y. [65P] Exclusion: Grade 13 German/GER100Y/105Y

GER202Y Language Practice I

Review of basic grammar, expansion of basic vocabulary, practice in comprehension and in the active skills of writing (translations, compositions) and conversation. Students intending to specialize in German must take a first-year literature course as well. The Department reserves the right to place students in the appropriate course in the series GER202Y, 210Y, 310Y, 410Y. [104P] Exclusion: GER200Y, 205Y Prerequisite: Grade 13 German/GER100Y/101H

GER204Y The Contemporary Scene in German Literature

An introduction to German literature through the reading of texts which reflect cultural trends and socio-political issues of the German-speaking countries. [78L] Prerequisite: Grade 13 German/GER100Y/101H with Departmental approval

GER210Y Language Practice II

German at the intermediate level: extension of vocabulary, specific problems of grammar, practice in translation, essay-writing, reading and conversation. Students taking this course and intending to specialize in German must take a second-year literature course as well. The Department reserves the right to place students in the appropriate course in the series GER202Y, 210Y, 310Y, 410Y. [104P] Exclusion: GER205Y Prerequisite: GER202Y

GER222Y German Literature from 1870 to 1945
A study of prominent literary works in the period from the unification of Germany under Bismarck, through the Weimar Republic, to the downfall of the Third Reich. [78L]
Prerequisite: GER202Y, 204Y

GER251Y The Development of German Cinema
German cinema from its beginnings as an art form to its current renaissance. Includes films by such directors as Murnau, Herzog, Fassbinder, and Wenders. Knowledge of German not required; previous film studies experience not required. [52S, 52P]
Offered in 1988-89 and alternate years.

GER271Y German Civilization
A comprehensive study of German culture through the ages. Special consideration will be given to art history, music, and philosophy within their historical context. A description and analysis of present-day Germany will be included. No knowledge of German is required. Available to First-Year students by permission of the instructor. [78L]

GER310Y Language Practice III
Study of idioms, translation, essay writing, reading, problems of grammar and oral practice. The Department reserves the right to place students in the appropriate course in the series GER202Y, 210Y, 310Y, 410Y. [78P]
Prerequisite: GER210Y

GER321H Literature of the Enlightenment
A study of selected works of the *Aufklärung* with emphasis on Lessing as its foremost representative. [39L]
Prerequisite: GER222Y
Offered in alternate years.

GER322H Literature of the Storm and Stress
A study of some of the early works of Goethe and Schiller and their contemporaries. [39L]
Prerequisite: GER222Y
Offered in alternate years.

GER326H Introduction to Middle High German
An introduction to the language, literature and civilization of Mediaeval Germany. [39L]
Prerequisite: GER210Y/222Y
Offered in 1988-89 and alternate years.

GER327H Mediaeval German Literature
Literary analysis of works such as Gottfried's *Tristan*, the *Nibelungenlied*; Middle High German poetry. [39L]
Prerequisite: GER326H
Offered in 1988-89 and alternate years.

GER331H Young Germany and Biedermeier
Post-Romantic literature in the first half of the 19th century; authors such as Heine, Büchner, and Stifter will be studied. [39L]
Prerequisite: GER222Y
Offered in alternate years.

GER332H 19th-Century Realism
The development of German literature in the wake of the Revolution of 1848. [39L]
Prerequisite: GER222Y
Offered in alternate years.

GER410Y Language Practice IV
Selected problems in grammar, translation, and essay writing at the advanced level; reading, and oral practice. The Department reserves the right to place students in the appropriate course in the series GER202Y, 210Y, 310Y, 410Y. [78P]
Prerequisite: GER310Y

GER421Y German Drama from Büchner to the Present: Theory and Practice
The development of modern German drama through the study of such playwrights as Büchner, Hebbel, Hauptmann, Kaiser, Brecht, Dürrenmatt, Handke and Fassbinder. [78L]
Prerequisite: GER222Y
Offered in alternate years.

GER422Y Contemporary German Literature: 1945 to the Present
A study of major authors since the Second World War, including Böll, Celan, Dürrenmatt, Frisch, Grass and Christa Wolf. [78L]
Prerequisite: GER222Y
Offered in alternate years.

GER425Y Goethe-Schiller-Hilderlin
Works to be studied include *Faust* I and II, Schiller's later plays and Hilderlin's poetry. [78L]
Prerequisite: GER222Y
Offered in alternate years.

GER431H Early Romanticism
(Formerly GER325Y)
The origins and early manifestations of Romantic thought. Works by such authors as Friedrich Schlegel, Novalis, and Tieck. [39L]
Prerequisite: GER222Y
Offered in 1988-89 and alternate years.

GER432H Later Romanticism
(Formerly GER325Y)
The culmination of the Romantic movement, including the Heidelberg group of writers, whose works played a major role in the development of European Romanticism. Authors such as Ar-

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nim, Brentano, Eichendorff, the Grimm brothers, and E.T.A. Hoffmann will be studied. [39L]

Prerequisite: GER222Y

Offered in 1988-89 and alternate years.

GER490H Independent Study

A reading and research project in German literature or linguistics.

Prerequisite: Permission of Department to be obtained by May 12th for the Fall term; by November 11th for the Spring term.

Faculty Advisor: Professor P.-Y.F. Robin

The Geological Sciences deal with the origin, evolution and structure of the Earth and other planets, through the analysis of physical, chemical and biological processes. Modern theories of global dynamics continue to provide new insights into our understanding of the Earth's behaviour and of its relationship to the other planets.

Geoscientists (Geologists, Geophysicists, Geochemists) have always contributed greatly to our knowledge of the history of our planet, including its origins, physical evolution, and the history and evolution of life. The ability to read the rock record is one of the important skills of the geoscientist, and is essential for unravelling the mystery of how our planet came to be.

The geoscientist holds a leading place in the search for materials of economic value such as oil, gas, metals, coal and industrial minerals, and the evaluation of potential hazards in our natural environment. The exploration and development of natural resources constitute one of the largest industries in Canada, and has always been a major employer of geoscientists. Advances in the understanding of earthquakes, volcanoes and other natural hazards have enabled geological scientists to be actively involved in evaluating methods of hazard prediction.

A career in the Geological Sciences leads to opportunities for work in many parts of the world. In addition, modern geoscientists use a wide variety of analytical and experimental techniques in order to characterize earth materials (X-ray diffraction, electron microscopy, neutron activation, high temperature and high pressure experimental studies).

Erindale provides a broadly-based preparation for careers in the geological sciences. We offer a spectrum of courses encompassing the fields of geophysics, structural geology, sedimentology, geochemistry, petrology, stratigraphy, and invertebrate paleontology. Four specialist programmes are offered, in Geology, Geology and Physics, Geology and Chemistry, and Geology and Geography (see Earth Resources). We also offer a major program in Geological Sciences. These programmes are outlined in Section 7 of this Calendar; note that most fourth year courses are taken on the St. George campus. Many of our courses will be useful to students specializing in other fields such as Commerce, Environmental Geography, Survey Science, Biology, Vertebrate Paleontology, Metallurgy, Anthropology, and Civil Engineering.

GSC110H Violent Events in Earth History

Earthquakes, volcanic eruptions, tsunamis and landslides are examples of sudden, sometimes catastrophic, events that occur in response to forces that originate deep in the Earth's interior and

which, together with the action of water and wind, are continually reshaping the Earth's surface. This course will discuss the methods that are used to monitor, predict and control these potentially hazardous phenomena. Recent theories that asteroidal impacts with Earth have caused periodic mass extinctions of life will also be discussed.

GSC120H Planet Earth

We explore the scientific principles and methods used by geologists to discover and study the history, structure and evolution of our planet. Among the topics discussed are the origin of the Earth, exploration of the deep interior of the Earth, the world of minerals and rocks, plate tectonics, and the natural history of the Earth's crust. Practical work focuses on some examples of the methods used to study the Earth, introduces students to minerals and rocks, and teaches how to read topographic and geologic maps. [26L, 39P]

Recommended preparation: Grade 12 or 13 Physics and Chemistry.

GSC121H The History of Life

The history of life on Earth, beginning with the origins of life, and emphasizing the major events, trends, and innovations. The course concentrates upon the fossil record, especially that of the oceans, and treats topics as diverse as: extinctions, ocean environments, appearance of skeletons, fossilization, adaptations, etc. [39L]

GSC219H Mineralogy

The lecture material covers the principles of mineralogy: crystallography, physical and chemical properties of minerals, their formation and occurrence and the descriptive mineralogy of some 70 mineral species. The practical work is devoted to crystal and mineral recognition. This is a course in mineralogy for students who wish to pursue careers in Earth Sciences and Geography. [26L, 39P]

Prerequisite: GSC120H

Corequisite: CHM135Y/150Y/P.I.

GSC220H Geological Maps and Their Interpretation

Geological maps are both primary results and essential tools of Geology. Interpreting a geological map is, in effect, reading the geological history of the area represented on that map as told by the mapper. This course is an introduction to the methods used in producing geological maps and to the geometrical and graphical methods used to read and interpret them. Students learn the significance of rock distributions, learn to recognize geological structures and to construct cross-sections from surface and bore-hole information.

[13L, 26P (one two-day field trip)]

Prerequisites: A geology course in senior high school (See Faculty Advisor)/GGR100Y/GSC110H/120H/121H

GSC221H Optical Mineralogy

This course offers an introduction to optical crystallography and to the optical properties of rock-forming minerals observed with the petrographic microscope. [26L, 39P]

Prerequisite: GSC219H

Corequisite: CHM135Y/150Y

GSC222H Rock Identification in Hand Sample

The lectures emphasize rock classification and description, procedures for rock identification and introductory petrogenesis. The laboratory work consists of the description and identification of rock specimens. [26L, 39P]

Prerequisite: GSC219H

GSC230H Chemical Processes in Geology

This course introduces the principles of heterogeneous and homogeneous equilibria involving solid, liquid and gaseous phases within the Earth. The topics include a review of the fundamental concepts of reversible and irreversible chemical processes, derivation of the phase rule and the development of phase diagrams from solution models. Numerous examples of the application of phase diagrams to questions of geological importance will be presented throughout the course. [39L]

Prerequisite: CHM135Y/150Y

GSC237H Geology of the Solar System

We will examine the recent explosion of knowledge concerning the sun, planets and other members of our solar system. The course emphasizes the terrestrial planets – Mars, Earth, Venus, and Mercury – because of our greater knowledge of these through numerous landing, orbiting and flyby missions. The asteroids, comets, and the giant planets and their satellites will be discussed particularly as they pertain to theories of the origin and evolution of the solar system. [26L, 13P]

Prerequisite: MAT132Y/138Y, one 100 level AST/CHM/GSC/PHY course

GSC270H Fossils and Regional Stratigraphy

The lectures treat the principles of stratigraphy and biostratigraphy, and the history of sedimentation in North America (emphasizing northeastern North America) from the Middle Precambrian to the end of the Paleozoic. The laboratories comprise an introduction to the major groups of invertebrate organisms found as fossils; the emphasis is upon those groups of major biostratigraphic and paleoecological significance. [26L, 39P]

Recommended Preparation: GSC121H

GSC320H Igneous Petrology

The principles of classification and interpretation of igneous rocks are examined. The topics include a description of volcanic eruptions and their products, the interpretation of chemical and mineralogical data from igneous rock suites, the physics and chemistry of igneous processes, the structure and properties of molten rock and the role of igneous differentiation in the chemical evolution of the Earth, the origin of the continents, and the formation of magmatic mineral deposits. The practical work emphasizes the recognition and description of igneous rocks in hand specimens and thin section. [26L, 39P]
Prerequisite: GSC221H, 222H, 230H

GSC321H Metamorphic Petrology

The principles of classification and interpretation of metamorphic rocks are examined. Topics include the graphical description of metamorphic assemblages and metamorphic reactions, the mineralogical phase rule, the development and use of projections for metamorphic phase diagrams, an introduction to petrogenetic grids, metamorphic facies and facies series and their tectonic significance, and an introduction to the kinetics of metamorphic reactions. The practical work emphasizes the recognition and description of metamorphic rocks in hand specimens and petrographic thin sections. [26L, 39P]
Prerequisite: GSC221H, 222H, 230H

GSC322H Structural Geology

The topics of importance in the study of deformed rocks include tectonite fabrics, folding, faulting and mechanisms of deformation under various conditions. The practical work consists of weekly laboratory sessions on graphical methods in structural geology, and of a one-day field trip to examine deformed metamorphic rocks in the Muskoka district. [26L, 39P]
Prerequisite: GSC220H, 222H, PHY132Y/140Y

GSC332H Tectonics

The principles of plate tectonics are used to help unravel problems in the development of the Earth's crust. The topics include plate kinematics, driving mechanisms, processes at plate margins, orogeny, intraplate tectonics, and epeirogeny. The laboratory work emphasizes map interpretation and geological reconstruction. [26L, 39P]
Prerequisite: GSC220H, 222H
Recommended preparation: GSC322H

JGP334H Physics of the Earth

(See Joint Courses)

The course deals with the quantitative physical description of the Earth: its dynamics, internal structure, and tectonic history. Topics covered in detail are radioactivity and radiometric dating

of rocks, the Earth's rotation and dynamics of its gravitational and magnetic fields, ancient magnetic fields, and seismological evidence for the internal structure and composition of the Earth. Extensive use is made of potential field methods and the solution of partial differential equations. [26L, 13T]

Prerequisite: PHY218F, 221F, 250Y
Recommended preparation: GSC120H

GSC335H Geophysics

The methods of geophysics are introduced and applied to our understanding of large scale features and processes of the Earth's crust and upper mantle, and of the structure of the deeper interior of the Earth. Seismicity, gravity, magnetism, and geothermics will be studied in theoretical and practical ways. [39L, 26P]
Prerequisite: GSC120H, PHY120Y/132Y/140Y
Corequisite: GSC219H

GSC375H Ancient and Modern Carbonates

This course is a practical guide to carbonate sediments and rocks (limestones and dolomites), and their analysis and interpretation in thin section and hand sample. The topics include grain types, grain size and other grain parameters, classification, neomorphism, cementation, dolomitization, diagenetic processes, and reef carbonates. [26L, 39P]
Prerequisite: GSC219H, 221H, 270H
Recommended preparation: GSC222H

GSC376H Principles of Clastic Sedimentology

This course examines the composition, textural characteristics and depositional processes of terrigenous clastic rocks and discusses their depositional and tectonic environment. [26L, 39P]
Prerequisite: GSC375H

GSC437H Geophysical Methods in Mineral Exploration, I

Basic principles, instrumentation, field procedures and elementary interpretation techniques are outlined for gravity, magnetic, radiometric and geothermal methods used in exploration geophysics. Practical work emphasizes gravity and magnetic field surveys and the interpretation of aeromagnetic maps. [26L, 39P]
Prerequisite: GSC222H, PHY132Y/140Y
Recommended preparation: GSC335H

GSC438H Geophysical Methods in Mineral Exploration, II

Basic principles, instrumentation, field procedures and elementary interpretation techniques are outlined for the seismic, electrical and electromagnetic methods of mineral exploration. Practical work will include laboratory experiments that simulate field situations and an exploration exercise

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(See Classics)

that tests the student's skill at integrating the results from several different types of survey. [26L, 39P]

Prerequisite: GSC222H, PHY132Y/140Y, GSC437H/P.I.

Recommended preparation: GSC335H

GSC460H Seismic Stratigraphy

Reflection seismology is applied to the study of crustal structure and stratigraphy, and to the exploration for oil and gas. The emphasis will be on stratigraphic modelling and the interpretation of seismic data. The laboratories include computer and physical modelling of reflection seismograms for various geological situations, laboratory measurement of seismic wave velocity, and interpretation of borehole logs and seismic sections from an area of active petroleum exploration. [26L, 39P]

Prerequisite: GSC220H, PHY132Y/140Y

Recommended preparation: GSC335H, 375H, 376H

GSC470Y Research Thesis

Arrangements for these independent research projects must be made with a Geological Sciences Faculty member before registration. Copies of the completed thesis must be submitted one week prior to the end of term classes.

Exclusion: GSC471H/472H

Prerequisite: Any 2 full course equivalents from the GSC300 series, plus a 75% average in the last 5 courses taken.

GSC471H Research Project

Arrangements for these independent research projects must be made with a Geological Sciences Faculty member prior to registration. Copies of the completed thesis must be submitted one week prior to the end of term classes.

Exclusion: GSC470Y

Prerequisite: Any 2 full course equivalents from the GSC300 series, plus a 75% average in the last 5 courses taken.

GSC472H Research Project

Arrangements for these independent research projects must be made with a Geological Sciences Faculty member prior to registration. Copies of the completed thesis must be submitted one week prior to end of term classes.

Exclusion: GSC470Y

Prerequisite: Any 2 full course equivalents from the GSC300 series, plus a 75% average in the last 5 courses taken.

GRK100Y Introductory Greek with Selected Readings

Introduces beginners to the ancient Greek language and prepares them for the reading of Greek literature. [104S]

Offered in alternate years.

GRK210H Socrates On Trial

Plato, *Apology of Socrates*. Further study of the language. [39S]

Prerequisite: Grade 13 Greek/GRK100Y

Offered in alternate years.

GRK213H The Wanderings of Odysseus

Homer, *Odyssey*, 6, 9, 11. Further study of the language. [39S]

Prerequisite: Grade 13 Greek/GRK100Y

Offered in alternate years.

HISTORY

Faculty Advisor: Professor R.E. Johnson
ERINDALE HISTORY HANDBOOK. A fuller description of the History programme is available in the History Handbook, which is produced in the Spring. It gives detailed information on course outlines, timetabling and programme requirements, and is available from the History Department, Room 227, North Building, phone 828-5283. It is an essential supplement to the Calendar, and students are urged to consult it.

History is exclusively neither an art nor a science, but a subtle blend of the two. The historical imagination reaches beyond the limits imposed by scientific method, but it does not enjoy unfettered poetic license. What is not required of art is required of history – to discover what the old universe was like rather than to invent a new one. We study the past in order to influence, no matter how modestly, the world around us and the world within us. Historical inquiry is always a response to the human need for information, an understanding of the broad patterns of social development. Concentration in history can provide students with the analytical skills and intellectual judgement required in a number of fields. From academic research and teaching to a career in publishing, journalism or the media, the historian's contribution is substantial. Training in history is appropriate preparation for a career in law or in government service, for example, as a researcher, archivist or policy analyst.

The history programme at Erindale is designed to give students a comprehensive view of the modern world. Strong core areas in European, Canadian and American History are supplemented by courses in British, Russian, Latin American and Third World History. Introductory 100 and 200 level courses are normally conducted as a combination of lecture and tutorial; more advanced courses are often offered as seminars, allowing students experience in independent research and in presenting their findings.

Students wishing to receive certification in History must register annually, beginning in their second year, with the History Secretary (Room 227, North Building), to ensure their progress through the programme.

Please see Section 7 for details of Programme Requirements.

HIS100Y Modern Europe, 1789-1945

Europe from the French Revolution through the Second World War. Political, economic, social and cultural aspects will be covered. [52L, 26T]
(Not offered in 1988-89)

HIS110Y Headlines and History

Where did the problems and crises that are covered by today's newspapers and television come from? By combining an examination of significant contemporary issues with a study of some of their historical roots, this course will explore the tools and insights historians and students of history can bring to observation of the world around them. Specific topics will vary from year to year, but some of those which might receive attention include: South Africa and "apartheid"; Middle East tensions; "Star Wars" and disarmament; the cycle of growth and weakness in modern economies; drug use as a social crisis; rock music as a cultural phenomenon. [52L 26T]
Exclusion: HIS100Y
Enrollment will be limited.

All 200 Level courses are open to first year students.

HIS200Y (I) Europe, 1300-1700

A survey of Europe in the late Middle Ages and the early Modern period, a time often characterized as a transitional phase between the 'Medieval' and 'Modern' worlds. [52L]
Exclusion: HIS243H, 244H

HIS204Y (I) History of Italy

A general survey of the history of Italy: political, social, economic and cultural. [52L, 26T]
(Not offered in 1988-89)

HIS220Y (I) The Shape of Medieval Society

An introductory survey of European history, from the late Roman Empire to the fourteenth century, outlining the major developments which account for the shape of medieval civilization and its influence on subsequent centuries. [52L, 26T]

HIS231Y (I) History of Great Britain, 1800-Present

The major themes of British history from the early nineteenth century—the effects of industrial society, the development of parliamentary democracy, the emergence of the welfare state, foreign and Empire relations, and religious, cultural and intellectual change. [52L, 26T]
Exclusion: HIS234Y, 239H
(Not offered in 1988-89)

HIS233Y (I) Politics and Social Change in England, 1530-1800

An introduction to the development of government and society in England from the sixteenth to the eighteenth century. Attention will be given to such events as the English Reformation, the Civil War, the Glorious Revolution, the beginnings of industrialization, and the challenge of the American and French Revolutions. [52L, 26T]
Exclusion: HIS230Y, 234Y, 238H
(Not offered in 1988-89)

HIS241H (I) Europe in the 19th Century
An introduction to the principal themes of western and central European history from the fall of Napoleon to the 1890's. [26L, 13T]
Exclusion: HIS100Y

HIS242H (I) Europe in the Contemporary Era
The evolution of European politics, culture, and society from 1890: the origins and consequences of the two world wars, the Bolshevik Revolution and Stalinism, Fascism and Nazism, the post-1945 reconstruction and division of Europe. [26L, 13T]
Exclusion: HIS100Y

HIS244H (I) Early Modern Europe, 1648-1815
The political, social, economic, and intellectual history of continental Europe. The Renaissance, the Reformation, Counter-reformation, growth of the territorial monarchies, the religious wars. [26L, 13T]
(Not offered in 1988-89)

HIS248Y (I) The Industrial Revolution
The economic, technological and social transformation of European society in the eighteenth and nineteenth centuries. Why did these transformations occur when they did, and why did certain nations become industrial more rapidly and completely than others? [52L, 26T]
(Not offered in 1988-89)

HIS262Y (I) History of Canada
An introduction to the social, political and economic history of Canada. Particular attention to regional diversity, the development of political movements, and the implications of economic development based on staples. [52L, 26T]

HIS271Y (I) American History Since 1607
A survey of significant developments in American history (e.g., the American colonies, the Revolution, the Civil War, industrialization, the effects of the Cold War) and important characteristics of American society (e.g., social mobility, racism, imperialism). Lectures and readings will combine the perspectives of political, social, economic and diplomatic history. [52L, 26T]

HIS290Y (I) Latin America: From Conquest to Revolution, 1492 – the Present
Major themes in the history of South and Central America and the Caribbean from the time of Columbus to the present. Discussion will focus on such issues as nationalism, development and underdevelopment, revolution, militarism and cultural identity. [52L, 26T]
Exclusion: HIS289H, HIS290H
(Not offered in 1988-89)

HIS300Y War and the Military in American History
How Americans have approached, experienced and been affected by war, and the development and sociology of the military establishment, beginning with the nature of early modern warfare and its application in Anglo-America through United States involvement in Vietnam and the experiment with a volunteer army. [52L]

HIS304H History by Numbers
Through a series of case studies, this course will examine the uses of quantitative evidence in history, and the role of computers in analyzing such evidence. Case studies will include the economic basis of slavery; the "rise of the gentry"; historical trends in births, marriages, and death; labor unrest; and voting behavior. In each instance, published works will be discussed and criticized, and simple exercises (some involving computers) will be used to demonstrate the methods and problems associated with this branch of historical study. [13L, 13T]
Prerequisite: One History course
(Not offered in 1988-89)

HIS307H The Russian Revolution of 1917
The fall of the Romanovs and the coming to power of the Bolsheviks have been subjects of intense controversy for more than 60 years. This course will examine the principal interpretations of these events by focusing on original sources from 1917, e.g., memoirs, resolutions, diplomatic and journalistic reports, all of which are abundantly available in English. Each student will focus on a single party or personality, whose actions and ideas will be followed through the tumultuous days of 1917. [26L]
Recommended preparation: One course in Modern European History

HIS308Y The History of Women since 1500
This course will look at some important aspects of women's lives that have changed in the past four hundred years – the value and nature of women's work; the relationship between work and personal relationships; the role of women in the family and the involvement of women in public and political life. Although the course will mainly look at European sources, and the experiences of European women, it will consider American material insofar as it is supplementary or illustrative. [52L, 26T]
Recommended preparation: A course in European history
(Not offered in 1988-89)

HIS309H The Atlantic Provinces, 1500-Present
An historical introduction to an often neglected region of Canada. Emphasis on the chronic economic underdevelopment of this region, the cause of dissatisfaction in the hinterland and the development of a regional identity. [13L, 13T]
Prerequisite: HIS262Y

HIS310H The American West
Westward expansion and the West in the life of the nation from the colonial era through the twentieth century. Major themes will include myths of the American frontier; the migration of peoples and transportation developments; the farming, cattle and mining frontiers; problems of law and order and confrontations with Native Americans; western society and culture; the urban west; and the frontier heritage. [13L, 13T]
Recommended preparation: HIS271Y
(Not offered in 1988-89)

HIS313Y Canadian Labour and the Left
A study of the growth of the Canadian labour movement since Confederation and of the related development of Canadian radicalism. Social, economic and regional themes will be incorporated. [52S]
Prerequisite: HIS262Y/ECO244Y
(Not offered in 1988-89)

HIS314Y French Canada Since the Conquest
The development of the French-Canadian community in Canada, French-Canadian nationalism, the political and economic development of Quebec, and the cultural evolution of French-Canadian society both within and outside of Quebec. [52S]
Prerequisite: HIS262Y

HIS315Y Bandits, Pirates and Outlaws in History
Historical analysis of delinquency and outlawry, from Robin Hood to the Mafia. Themes to be examined will include "social banditry" (Robin Hood, Pancho Villa, Billy the Kid, etc.); the classic Caribbean privateers of the 17th century (Sir Francis Drake, Henry Morgan, etc.); elite-sponsored gangsterism in rural societies (as in southern Europe and Latin America until recent times); criminal protection rackets (the Mafia); and political guerrilla movements. [52L, 26T]
Recommended preparation: Any previous course in history.

HIS319Y Social Movements in 20th Century Canada
An examination of social movements and political protest in Canada from the 1890's to the 1970's. Particular attention will be given to the growth and impact of the social gospel, temperance and prohibition, trade unions, socialist parties, women's

movements, regional protest and French Canadian nationalism. [26L, 26T]

HIS326Y Europe 400-1100
This course examines the transition from ancient to medieval society and the main elements shaping the distinctive civilization of early Europe. Major topics: barbarian culture in the pre-Roman and Roman iron age; paganism and christianity; the problem of the "Fall of the Roman Empire"; law and society in late antiquity and early Middle Ages; the world of Gregory of Tours; the empire of Charlemagne; early feudalism. [52S]

HIS327Y War and Revolution in 19th Century Europe
The impact of war and revolution on European history from Napoleon to the First World War. Major topics will include the Napoleonic Empire and the Vienna Settlement, the Revolutions of 1830, the Revolutions of 1848, the Crimean War, the wars of Italian and German unification, the Russo-Turkish War, war and colonial expansion, the Russo-Japanese War and the Russian Revolution of 1905, the Balkan Wars, and the outbreak of war in 1914. [52S]
Prerequisite: P.I.
(Not offered in 1988-89)

HIS329Y The Conflict of Nationality in Modern Ireland
A topical analysis of modern Irish history concentrating on the conflict of constitutional, social, revolutionary and cultural nationalism. Topics include Fenianism, Home Rule, the 1916 rising, the partition of Ireland and Ulster's time of troubles since 1968. [52L]
Exclusion: SMC348Y

HIS334H Multinational Corporations and International Relations
A study of the emergence of multinational corporations and their impact on international relations since the late 19th century. Major topics will include: the methods and pace of expansion of multinational enterprise; the relationships of multinationals with their parent governments, with other developed countries and with underdeveloped societies; multinational corporations and war. [13L, 13T]
(Not offered in 1988-89)

HIS335H Mexico: From Conquest to Independence (1519-1810)
The formation of the Mexican nation from the destruction of the Aztec empire by Hernan Cortes and his band of adventurers, through 300 years of Spanish colonial rule to the outbreak of the struggles for independence. [13L, 13T]
Recommended preparation: HIS289H/290H/290Y

HIS337Y British History, 1815-1914

The major themes of British history from the late 18th Century: the emergence of industrial society, the fate of aristocracy and religion, cultural and intellectual change, foreign relations, constitutional development and political history. [52S]

Prerequisite: P.I.

(Not offered in 1988-89)

HIS338Y From Empire to Welfare State, 1906-Present

A topical analysis of political, economic and social issues in modern British history. Themes include the decline of the Liberal Party, the impact of two world wars, the making of the welfare state, Empire developments, post-war Labour and Conservative Britain. [52L]

(Not offered in 1988-89)

HIS343Y France and Germany 1848-1945

A comparative study of the development of France and Germany from the revolutions of 1848 to the end of the Second World War. Emphasis will be on the interaction of economic, social and political developments – including the diplomatic relations between them – but students will be free to pursue topics in intellectual and ideological history. [52S]

Prerequisite: P.I.

(Not offered in 1988-89)

HIS350Y The Social History of the Family

An examination of marriage, child-rearing, inheritance, and male-female relations. Trends and changes will be examined in the context of broader economic and social developments in Europe and North America since 1700. [52L, 26T]

(Not offered in 1988-89)

HIS353Y International Relations, 1870-1945

The international relations of the European powers at their zenith and in decline. The interaction of the European powers is studied from the creation of the Second Reich to the origins of the First World War, the Versailles settlement, the inter-war "twenty year crisis" through the Second World War. The economic and social framework will be examined as well as political conflicts. [52S]

Prerequisite: P.I.

HIS355Y Totalitarianism

An examination of controversial interpretations of this period by some of Europe's leading authors with a view to understanding better what underlies the triumph of the 20th century totalitarian movements – Fascism, Nazism, and Stalinist Communism. [52S]

Prerequisite: P.I.

(Not offered in 1988-89)

HIS356H Serfdom in Russia

(Formerly HIS356Y)

Why did serfdom arise and grow stronger in Russia at a time when similar systems of bondage were declining in Western countries? This course will examine the social and economic foundations of bondage in relation to other forces and trends: autocratic government, economic development, military organization, agricultural productivity, and peasant resistance. [13L, 13T]

(Not offered in 1988-89)

HIS357Y The Renaissance

A cultural history of the 15th and 16th centuries set against the socio-economic background. The course will concentrate upon the development of the Renaissance in Italy and will deal with its manifestations in Northern Europe. [26L, 26T]

(Not offered in 1988-89)

HIS359H History of Women in Canada

The role of women in the social and economic development of Canada since the founding of New France. Topics include: amerindian women, women in the fur trade, pioneer women, Victorian girlhood, marital sex and birth control, child-birth and motherhood, working women, feminism and reform, and the suffrage campaign. [26S]

HIS360Y The Canadian Political Tradition

The development since the 1830's of conservative, liberal, and radical approaches to the ideas and methods of Canadian political life. [52L, 26T]

Recommended preparation: HIS262Y

HIS365H Ontario

The study of the political, social and economic development of Ontario with special emphasis on the period from Confederation to the present. [26S]

Recommended preparation: HIS262Y

HIS367Y Problems in Canadian-American Relations

(Formerly HIS367H)

This course will deal with political, economic and cultural relations between Canada and the United States since the American Revolution. Particular emphasis will be given to American economic and cultural influences upon Canada. [52L 26T]

Exclusion: HIS461Y(G)

HIS368H Canada in the First World War

The First World War offers a focus for examining every aspect of Canadian society in an age recognizable and different from our own. Seminars will address the basis for Canada's involvement in the conflict, the Canadian military response and the problems and achievements of the CEF

overseas, the impact of the war on Canada itself, from the shaping of ideas to effects on education and the family. A deliberate focus will be on local and regional studies both to test national generalizations and to give students opportunities to practice techniques of quantitative and social history. [26S]

Exclusion: HIS392Y

Prerequisite: HIS262Y/POL100Y

HIS369H Industrialization of Russia, 1860-1939
A comparison of industrialization efforts of the tsarist and Soviet governments: dilemmas of backwardness; international trade and competition; mobilization of labour and capital; technology; pressures on the consumer economy; labour organizations and unrest. [13L, 13T]
(Not offered in 1988-89)

HIS372Y The United States in the Twentieth Century
Major developments in the economic, social, political, and cultural life of the United States during the past century. [52L]
(Not offered in 1988-89)

HIS376Y The United States Between the Wars, 1918-1941
The study of economic, political, cultural and diplomatic developments associated with the emergence of "modern America." Major topics will include: the strengths and weaknesses of a consumer and corporate society; the transition from Republican to Democratic Party dominance; youth culture and protest culture; and the expansion of economic and political activity in the international arena. [26L, 26T]
Recommended preparation: HIS271Y/372Y
(Not offered in 1988-89)

HIS377Y Topics in Twentieth Century American Diplomacy
An examination of United States behaviour on the international scene since the 1890s. Economic, political and ideological factors involved in the growth of the American empire, World War I, World War II and the Cold War will be studied. [26L, 26T]

HIS379H Spain and Portugal from Napoleon to Franco, 1808-1936
The Iberian powers, pioneers in European expansion, had by 1800 been reduced to a marginal position in European politics. This course will examine the tremendous crisis provoked by the Napoleonic invasion and the independence of Latin America, the prolonged liberal/conservative struggles of the 19th century, the slow beginnings of industrialization, and the emergence of com-

bative anarchist and socialist movements leading up to the pro-fascist *coup* of 1926 in Portugal and the Spanish Civil War (1936-39). [13L, 13T]
(Not offered in 1988-89)

HIS384Y The American South
The social, economic and political history of the American South from the first settlement of Virginia to the 1970's: the role of the South in the formation of the new nation, the emergence of Southern sectionalism, secession, the origins of the new South, labour relations, race relations. The course will be directed toward exploring the nature of Southern distinctiveness.
Prerequisite: HIS271Y
(Not offered in 1988-89)

HIS391H Mexico: Independence to Revolution, 1810-1960
A seminar considering the growth of the Mexican nation from the struggle for independence to the "institutional revolution" of today. [13L, 13T]
Recommended Preparation: HIS335H
(Not offered in 1988-89)

HIS392Y Canada and War
A topical examination of the Canadian experience of war and military preparedness including problems of political-military relations, conscription, aid to the civil power and militarism. [52L]
Recommended preparation: HIS262Y
(Not offered in 1988-89)

HIS397H From Fascism to Democracy: Spain and Portugal, 1936-the Present
With the outbreak of the Spanish Civil War in 1936, the deep-rooted social conflicts of the Iberian peninsula merged with the general European struggle between fascism and democracy. The course will examine both political and military aspects of the civil war, the Franco and Salazar dictatorships, the role of the Church, the Communist Party and the liberal opposition in both countries, leading up to the Portuguese Revolution of 1974-75 and the liberalization of Spain following Franco's death in 1976. [13L, 13T]
Prerequisite: P.I.
(Not offered in 1988-89)

HIS417Y Indians and Indian Policies in American History
(Formerly HIS330Y)
A study of the relationships between Indian tribes and the government and society of the United States. Major themes will include pre-contact society and culture; the colonization of America and the origins of race consciousness; Indian removal; movements for cultural renewal; the frontier wars and Indian participation in America's

major wars; the concentration, reservation and allotment policies; the Indian New Deal; and the Red Power movement. [52S]
(Not offered in 1988-89)

HIS431Y Topics in Twentieth Century British Diplomacy

The exercise and decline of British power in foreign affairs, including war aims and the peace settlements of World War One, appeasement between the wars, World War Two, socialist alternatives in foreign affairs, the Suez crisis, Rhodesia, and the European Economic Community. [52S]
(Not offered in 1988-89)

HIS438Y The Making of the Modern Welfare State
The seminar will examine in a topical form the emergence of the modern welfare state. The Elizabethan Poor Laws, succeeding forms of social assistance, insurance and security, the post-war welfare state and its contemporary critics will be analyzed. [26S]
Exclusion: HIS438H

HIS445Y The Viking Age

A seminar on the history of Europe from the eighth to the eleventh centuries with emphasis upon the Scandinavians and their relations with western European civilization. Readings will be in both primary and secondary sources. [52S]
(Not offered in 1988-89)

HIS466H Western Canada

The study of Western Canada from the 1850's to the present. Themes include economic development, immigration and settlement, rebellion, the unique political culture, and regionalism. [26L]
Recommended preparation: HIS262Y

HIS478H Immigration and Ethnicity in American History
(Formerly HIS378Y)

The seminar will consider the extent to which the United States has been a "melting pot", including migrations to and settlement patterns in America, concepts of nationality and race, and the processes of assimilation and acculturation. [26L]

HIS479Y Cold War America

An examination of significant political, economic, social and intellectual developments, including Cold War foreign policies, economic and social reforms, McCarthyism, the Civil Rights movement, women's liberation, the "counter-culture," and the Indochina Wars. [52S]
Prerequisite: P.I.

HIS484Y Revolution and Reaction in Latin America (Formerly HIS389Y)

A course focusing on politics and revolutionary movements in modern Latin America and related areas (e.g., southern Europe); emphasis will be placed on three or four particular countries, to be studied on a comparative basis. The course will also attempt to introduce possible approaches to history as a social science. [52S]
(Not offered in 1988-89)

HIS485Y The Problem of Government in Classical Greece

A study of forms and ideas of socio-political organization in ancient Greece, concentrating on Athens, from Solon, the founder of her democracy, to Pericles, its greatest exponent. [52S]
(Not offered in 1988-89)

HIS486Y From Republic to Principate

The breakdown of republican institutions and the evolution of the autocratic system of the Principate, traced from 133 B.C. to 14 A.D., focussing particularly on the life and work of Julius Caesar and Caesar Augustus. [52S]
Exclusion: CLA354Y

HIS487Y Canadian Social History

The transformation of Canada from an agrarian to an industrial society. Themes include migration and ethnicity, urbanization and industrialization, violence and social order, social stratification, education and family life, work relations. [52S]

HIS492Y Capital, Labour and Power in Latin America

This seminar will examine forms of labour organization in urban and rural Latin America in the 19th and 20th centuries, in the context of changing patterns of economic development. Slavery, debt peonage and free wage labour, the emergence of trade unions, the role of immigrant workers in such countries as Argentina and Brazil, State repression and/or patronage of trade union movements, and political ideologies of labour (anarchism, socialism, communism, populism) are among the topics to be covered. [52S]
Prerequisite: P.I.

Recommended preparation: An introductory course in Latin American history, politics or sociology

HIS497Y Independent Reading
(Formerly HIS401Y/403Y)

An independent study of an area of particular interest to a student or group of students carried out under the supervision of a staff member. No student may take more than one Independent Reading course in a single year.
Prerequisite: P.I.

HIS498H Independent Reading

An independent study of an area of particular interest to a student or group of students, carried out under the supervision of a staff member. No student may take more than one Independent Reading course in a single year.
Prerequisite: P.I.

HIS499H Independent Reading

An independent study of an area of particular interest to a student or group of students, carried out under the supervision of a staff member. No student may take more than one Independent Reading course in a single year.
Prerequisite: P.I.

Faculty Advisor: Professor R.L. Beck

"Interdisciplinary Studies" is the name given to a special programme of courses which, because of their innovative character, might not readily be accommodated within the programmes of the regular academic departments of the College. Subject areas are changeable from year to year and students are advised to consult the Associate Dean of Humanities for current details.

INE112Y Introduction to Film Studies

An introduction to film history, major aesthetic approaches and the rudiments of film language.
[26L, 78S, 26T]

Exclusion: INI112Y, NEW112Y, VIC112Y

INE203H Effective Writing

This half-credit course is for students who already write passable prose but who want to write better. The class will analyse the principles and practice of effective writing and explore various kinds of non-fictional prose, with special emphasis on the expository essay. There will be frequent writing exercises. A screening test will be given at the beginning of the course. [26L, 13P]

Exclusion: INE205H, ENG100Y, 103Y

INE205H Writing for Business

Aimed at students who will be entering the business world, and who already write passably, this half-course will explore the principles and practice of effective writing, with special emphasis on business correspondence and reports. There will be frequent writing exercises. A screening test will be given at the beginning of the course. [26L, 13P]

Exclusion: INE203H, ENG100Y, 103Y

INE390Y Independent Studies

A reading and research project, chosen by the student and supervised by a faculty member, designed to integrate work in an Approved Area of Study. The project will culminate in the writing of a substantial essay. The supervisor will be chosen in consultation with the Programme Co-ordinator. Open only to students enrolled in an Approved Area of Study. [TBA]

Prerequisite: Ten or more full-course equivalents and permission of the Programme Co-ordinator

INE401Y Senior Essay

A major independent research project chosen by the student and supervised by a faculty member. All projects must be approved by the Committee on Canadian Studies by the end of classes in the previous year. Application forms are available from the Programme Co-ordinator. [TBA]

Prerequisite: Open only to students with at least fifteen full-course equivalents and the permission of the Programme Co-ordinator

INE402Y Selected Topics in Canadian Studies

A seminar course considering varied perspectives on Canadian themes or periods as presented by several disciplines. The topics to be studied will be decided in accordance with the special interests of the students involved. [TBA]

Prerequisite: Permission of the Programme Coordinator

Faculty Advisor: G. Pugliese

The Italian programme at Erindale is designed to provide a comprehensive study of the diversity which is Italy, a country whose culture continues to be a significant force in the shaping of Western civilization. The greatest attention is devoted to literature, as a principal manifestation of the national spirit, with courses organized around major figures, movements or genres, but other facets of Italian life and civilization are also examined. Language is studied scientifically from all points of view – practical, stylistic, philological and historical – at all levels of instruction. Knowledge of another language and culture is regarded favourably by other disciplines and is frequently required for graduate-level studies. Graduates in Italian are in demand and will continue to be. There are career opportunities in teaching, foreign affairs, government, social services, trade and law. Furthermore, the presence of large Italian communities throughout Canada provides a social, intellectual and practical incentive for the study of Italian.

Students are free to design for themselves the programme of study best suited to their interests and needs, and they can choose from available courses at Erindale and at St. George. There are conditions, however, which must be satisfied (a) for specialization (in Italian alone) (b) for a major (in Italian and another discipline) and (c) for a minor.

In case of uncertainty with regard to the programme of study, course content, graduate studies requirements, or any related matter, students are strongly advised to consult the Associate Chairman for Italian at Erindale.

Please see Section 7 for details of Programme Requirement.

ITA100Y Italian for Beginners

An introduction to the Italian language for students of non-Italian linguistic background. Essentials of grammar, oral practice, language laboratory, translation. [104L, 26P]

Exclusion: Previous schooling in Italian

ITA110Y Beginning Italian For Dialect Speakers (Formerly ITA115Y)

An introduction to the main elements of Italian grammar for students who speak, understand or have studied some Italian but do not have Grade 12 or 13. Language laboratory, linguistic study of modern Italian prose, composition, conversation. [104L, 26P]

Exclusion: Grade 12/13 Italian

ITA200Y Continuing Italian

This course consists of a thorough review of grammatical structures and is designed to improve the students' self-expressiveness in Italian. Selections from contemporary authors and passages dealing with present-day issues are used as a basis for discussion in Italian. For students whose background in Italian is solely academic. [78L, 26P]

Prerequisite: Grade 13 Italian/ITA100Y/P.I.

ITA210Y Continuing Italian for Dialect or Native Speakers

A comprehensive review of Italian grammar with readings from a variety of texts. Composition and conversation are integral parts of this course. [78L, 26P]

Prerequisite: Grade 13 Italian/ITA110Y/P.I.

ITA221Y Forms of Modern Italian Literature

An introduction to twentieth-century Italian literature through a study of representative "novelle", shorter works of fiction, plays and poetry. Selections will include writings by Moravia, Calvino and Pandolfi and the major poems of Saba, Ungaretti, Montale, Quasimodo and others. [52L, 26T]

Prerequisite: Grade 13 Italian/ITA100Y/110Y

Recommended preparation: Good knowledge of Italian

Offered in alternate years.

ITA230Y Italian Literature Through the Ages

A survey of the shorter forms of Italian literature from the Middle Ages to the beginning of the twentieth century. Emphasis will be given to poems and "novelle" but theoretical pieces and short plays of recognized literary significance will also be examined. [52L, 26T]

Prerequisite: Grade 13 Italian/ITA100Y/110Y; 3rd & 4th year students need departmental permission.

Offered in alternate years.

ITA235Y Topics in Italian Civilization

Various aspects of modern Italian civilization such as fascism, the Resistance, mafia, industrialization, language and mass-media, immigration, the generation of '68, terrorism, women's liberation, religion and political ideologies will be discussed through a selection of short stories, novels, sociological and historical documents, articles from newspapers and magazines. [52L, 26S]

Prerequisite: Grade 13 Italian/ITA100Y/110Y

Offered in alternate years.

ITA240Y Italian Cinema (In English)

A course designed to explore the characteristics of the modern Italian film. The stress will be on works by such established masters as Visconti, Fellini and Antonioni, but films by younger directors (e.g. Wertmüller, Bertolucci) will also be examined. Analysis and discussion to be entirely in English. [52L, 26P]

ITA270H Reality, Myth, Death: The Modern Italian Novel (In English)

All classes will be conducted in English and all novels will be in English translation. Works to be read include: Moravia's *The Conformist*, Bassani's *Garden of the Finzi-Contini*, Silone's *Bread and Wine*. The background will be approached in informal group discussions. [26L]

Exclusion: ITA390Y

Offered in alternate years.

ITA272H Pirandello and the Modern Italian Theatre (In English)

The problem of conflicting realities and of the definition of the personality in the plays of Pirandello. Works by Betti and De Filippo (including *Marriage Italian Style*) will also be read. All texts and discussions will be in English. [26L]

Offered in alternate years.

ITA321Y Dante's *Divina Commedia*

An introduction to the work and thought of Dante, with special emphasis on the *Inferno* and *Purgatorio*. [52L, 26T]

Prerequisite: ITA200Y/210Y

ITA324Y Renaissance Prose and Poetry

An examination of treatises by Machiavelli, Castiglione, and Guicciardini, and poems by Lorenzo de' Medici, Poliziano, and Michelangelo, in relation to trends in Renaissance thought and the new concept of man and the world. [52L, 26T]

Prerequisite: ITA200Y/210Y/350Y

Offered in alternate years.

ITA325H Leopardi's *Canti*

A close reading of the poetry of Italy's finest lyric poet in the light of his prose writings and within the context of Classical and Romantic traditions. [26L, 13T]

Prerequisite: ITA200Y/210Y

Offered in alternate years.

ITA326H Petrarca

A study of Petrarca's poetry with some consideration of his influence on Italian and other literatures. [26L, 13T]

Prerequisite: ITA200Y/210Y

Offered in alternate years.

ITA340Y Italian Neo-realist Cinema

An analysis of the neo-realist movement in Italian cinema, and its relation to the political and social climate of post-war Italy. Screenings will include selections from the major exponents of Italian Neo-realism from Rossellini to the early Fellini. Conducted in English [52L, 26P]

Offered in alternate years.

ITA350Y Language Practice

(Formerly ITA340Y)

Intermediate – advanced level language course designed to give the student oral and written proficiency. Selected readings on questions of topical interest, discussions, compositions, some translation. [52L, 26P]

Prerequisite: ITA200Y/210Y

ITA355Y Intensive Language Practice

(Formerly 341Y)

The aim is to provide students with the necessary oral and writing skills required in the literature courses and for effective communication through the intensive examination and performance of expressive strategies. [26L, 52P]

Exclusion: ITA351Y(G), 352Y(G)

Prerequisite: ITA200Y/210Y/P.I.

Recommended preparation: Knowledge of the fundamentals of the Italian Language

ITA371Y Advanced Translation

Techniques and theories of translation, using modern texts containing a variety of linguistic codes. Some simultaneous translation. [26L, 52P]

Prerequisite: ITA350Y (formerly ITA340Y)/P.I.

Offered in alternate years.

ITA390Y 20th-Century Novel and Drama

Masterpieces of modern Italian fiction and drama analyzed against the background of modern-day Italy. One work will be examined in detail from each of the following novelists and playwrights:

Svevo, Vittorini, Buzzati, Calvino, Pirandello, Betti and De Filippo. [52L, 26S]

Exclusion: ITA270H

Prerequisite: ITA200Y/210Y

Offered in alternate years.

ITA395H Major Novels of the 19th-century

A study of the genesis and evolution of the Italian novel, with a close reading of Alessandro Manzoni's *I promessi sposi* and Giovanni Verga's *Malavoglia*. [26L, 13T]

Prerequisite: ITA200Y/210Y

Offered in alternate years.

ITA422H Theory and Practice of Textual Criticism

Central concerns of textual criticism, historical survey of discipline, principles involved in the reconstruction of early Italian texts, the various types of critical edition, analysis of recent works, actual reconstruction of an early text. [13L, 13S, 13P]

Prerequisite: ITA350Y

Recommended preparation: Sound knowledge of Italian

Offered every 3 years

ITA427H Boccaccio

A critical portrait of one of "the three crowns of Florence" through an examination of representative selections from his minor works and a detailed analysis of his masterpiece, the *Decameron*. [26L, 13T]

Prerequisite: ITA200Y/210Y

Offered in alternate years.

ITA436Y The 18th-century in Italy

An investigation of the intellectual trends and literary forms in Italy from the pre-enlightenment to Romanticism. Readings from the works of Vico, Muratori, Gravina, Metastasio, Rolli, Parini, Verri, Beccaria, Goldoni, Alfieri and others. [52L, 26T]

Prerequisite: ITA200Y/210Y

Offered in alternate years.

ITA437H Topics in the History of the Italian Language

The linguistic transition from Latin to Italian, the "Questione della lingua", developments in the 18th and 19th centuries, contemporary trends. Reading and linguistic analysis of representative texts. [13L, 13S, 13P]

Prerequisite: ITA200Y/210Y/350Y/355Y

Recommended preparation: Knowledge of Medieval/Renaissance and modern Italian literary culture.

Offered every 3 years.

ITA450Y Advanced Composition

Analysis of expressive strategies and discussion of problems relating to syntax, morphology and vocabulary as they arise from individual compositions and essays and from selected reading passages. [26L, 52P]

Prerequisite: ITA210Y/350Y (Formerly 340Y)/355Y (Formerly ITA341Y)

Offered in alternate years.

JOINT COURSES

JBG230Y (I) Man and Environment
Past and present man-environment relationships are examined; principles of ecology, environmental ethics and esthetics are outlined; crucial alternatives for man are discussed. Problems of current environmental concern – land use, material and energy resources, pollution are considered and illustrated by case studies from different parts of the world. Given by the Departments of Biology and Geography. [52L, 26T]

JBG491Y Environmental Research Project
Independent research on an environmental topic carried out under the supervision of a staff member whose written consent is required for registration. This project course is open to third and fourth year students. A written report of the research will be required and a seminar presentation may be required. Given by the Departments of Biology and Geography.
Exclusion: All other courses in independent research

IBP359Y Sociobiology: Biological Bases of Social Behaviour
Concepts from ethology, ecology, and population biology will be introduced and applied to the understanding of the evolution and biological function of social behaviour. Topics will include altruism, aggression, social spacing, dominance, sex, parental investment and care, social symbioses, and the evolution of life histories. Emphasis will be placed on the complex social systems of insects and mammals. Laboratory sessions will involve field observations, demonstrations, the preparation of individual projects. Given by the Departments of Biology and Psychology. [56L, 8P]
Prerequisite: BIO100Y/201Y/203H, PSY100Y

GP334H Physics of the Earth
The course deals with the quantitative physical description of the Earth; its dynamics, internal structure and tectonic history. Topics covered in detail are radioactivity and radiometric dating of rocks, the Earth's rotation and dynamics of its gravitational and magnetic fields, ancient magnetic fields, and seismological evidence for the internal structure and composition of the Earth. Extensive use is made of potential field methods and solution of partial differential equations. Given by the Departments of Geological Science and Physics. [26L, 13T]
Prerequisite: PHY240Y
Recommended preparation: GSC100H/120H/21H/335H

JGS340Y Concepts, Methods and Values in Urban Studies
Designed for students concentrating in urban studies irrespective of major disciplinary area. A survey of a variety of types of urban study from the social science perspective. Linkages between the ways in which urban phenomena and processes are conceptualized, the methods employed to study them and the often implicit system of values in which such investigations are framed. Urban researchers, both academic and applied, will be invited to discuss their research in the context of these issues. Given by the Departments of Geography and Sociology. [52L, 26T]
Prerequisite: SOC101Y/216Y, SOC205Y/
GGR245Y, SOC200Y/201Y/ (GGR202H, 207H, 280H)

LAT100Y Introductory Latin

A course designed to acquaint the student with the essentials of the Latin language and to introduce him to Roman literature. [104S]

LAT210H The Poetry of Catullus

Selections from the work of Catullus, including both the love poetry and the poetry of social comment with particular emphasis on the literary value of Catullus' work; includes study of the Latin language. [39S]

Exclusion: LAT215H(G)

Prerequisite: Grade 13 Latin/LAT100Y/130Y(G)

LAT211H The Poetry of Horace

Selections from the *Odes* of Horace, with particular emphasis on the literary quality of Horace's lyric poetry; includes study of the Latin language. [39S]

Prerequisite: Grade 13 Latin/LAT100Y/130Y(G)

LAT212H The Life and Times of Julius Caesar
Suetonius' biography, *The Divine Julius*, studied for the light it throws on the character and career of Julius Caesar. Some study of the Latin language. [39S]

Prerequisite: Grade 13 Latin/LAT100Y/130Y

LAT228Y Introduction to Roman Law

The purpose of this course is to improve the Latin of students with some interest in law. The reading will be selections from the second century A.D. textbook of Roman law, the *Institutes* of Gaius, which divides its subject into the law of persons, the law of things and the law of actions. Schultz' *Classical Roman Law* will be used for reference. The course will include some lectures on the history of Roman Law. [52T]

Prerequisite: Grade 13 Latin/LAT100Y/130Y(G)

The aim of Linguistics is to develop an understanding of how all languages work, and of how languages use disparate means for the same effects. The theme is the unity and the variety of human language. Such a theme subsumes many variations, including grammatical theory and its application to data, language divergence and convergence in space and time, the sociocultural stratification of linguistic systems, normal and pathological language behaviour and language learning.

Undergraduate Linguistics is a valuable component of a liberal education, especially in a multilingual country such as Canada. It is also valuable as pre-professional training for people interested in teaching English, French or other languages, in areas of rehabilitative medicine such as audiology or speech therapy, in special education, in work with native peoples or with immigrant groups in our society, in religious and missionary work, or in academic disciplines such as psychology, philosophy, literature and language studies, where the contribution of linguistics is increasingly recognized as important.

Students interested in linguistics should consider the following: ENG200Y, FRE272Y, GER326H, MAT104H, PHL245H, PSY315H, PSY374H, SOC152Y, SOC309Y, SPA425H.

LIN130Y Introduction to General Linguistics
(Formerly LIN100Y)

Lectures on fundamental principles with illustrations from English and from a broad spectrum of other languages. Practice in production recognition of speech sounds, and elementary analytic techniques. [52L, 26T]

Faculty Advisor: Professor P.H.H. Fantham

Mathematics, from its historical origins, has been based on notions abstracted from every-day life: number, magnitude, spatial position, etc. but concerned not so much with the concepts themselves as with what may be arrived at by consequence of simple observations about their essential meaning. Significantly, these observations themselves (the axioms) were left undiscussed within the subject itself. Moreover, since the beginning of the 17th century, the subject's conceptual scheme has been thickly cross-woven with a formal manipulative one (as exemplified in elementary algebra) whenceforth the mathematician laid aside his role of observer of the abstract and became a being acting within it. Throughout its further development, many other concepts, such as real and complex numbers, sets, groups – to name the simplest – were added. However, the general picture remained essentially the same, that is, of a working, grounded in logic, of what is disinterestedly accepted.

There are many ways in which mathematics is called for. To the humanist, mathematics is part of our western culture. To the scientist, it serves as an indispensable conceptual ground. The pure mathematician is interested in abstract mathematical activity in its own right and is led to the unfolding of the structure of mathematics almost as an art-form. The applied mathematician, by contrast, is more interested in the clarifying use he can make of this structure as he comes face to face with the world. He was traditionally involved solely with the applications of mathematics to certain problems of physics. Facets of present-day mathematics, however, give rise to significant contributions to science more generally understood and, as in Economics and Linguistics, to where mathematics appears, in some sense, as a foundation for the edifice of precise thinking. The Department of Mathematics, when providing its courses, is mindful of this multifariousness.

Traditionally, a training in mathematics has been much esteemed for careers in law and business. Nowadays, it serves equally for work in a variety of fields within the natural and social sciences. Thus, the professional mathematician will be found, schools and universities apart, in government and technologically oriented business organizations for which, for the most part, he will have required some post-graduate work. The Specialist Programme in Mathematics is recommended to students who want a deeper knowledge of the subject and particularly so to those intending to teach the subject in secondary schools. Students planning subsequent graduate work should consult the Department and take some advanced undergraduate courses on the St. George campus. Mathematics may also be com-

bined with other fields of study as in the various joint programmes.

The successionary nature of mathematics demands for most topics, specific knowledge and students should pay heed to prerequisites required for courses of possible subsequent interest to them. However, a student who wishes to take a course, but lacks an official requirement, may be permitted to do so if he shows himself adequately prepared.

First year students with sufficient background who want, either for itself or for other studies, a course of some substance are advised to take MAT138Y rather than 132Y.

See Section 7 for details of programme requirements.

MAT104H Symbolic Logic
Propositional calculus. Predicate calculus. (The aims of the course are to develop a clear understanding of logical concepts and to acquaint students with proof techniques). (Of general interest). [26L, 13T]
Exclusion: PHL245H

MAT105Y Introduction to Algebra and Calculus
Vectors, linear equations, matrices. Trigonometric and logarithmic functions. Limits, derivatives, extreme values, integrals. Applications. (Essentially a substitute for Grade 13 Mathematics). [52L, 26T]
Exclusion: Grade 13 Mathematics C, O.A.C. Calculus

MAT108H Introduction to Algebra and Number Theory
Introduction to abstract mathematics via the elementary topics in number theory and algebra. (Of interest to serious students). [26L, 13T]
Prerequisite: Grade 13 Algebra/O.A.C. Algebra and Geometry

MAT132Y Calculus
Techniques of differentiation and integration. Calculation of limits. Related rates. Extreme values. Graph sketching. Applications of calculus. Complex numbers. Sequences and series. Elementary linear algebra. Partial derivatives. (Primarily intended for non-specialists). [52L, 26T]
Exclusion: MAT130Y/133Y/135Y/138Y/139Y/149Y
Prerequisite: Grade 13 Mathematics R & F, C/
MAT105Y/O.A.C. Calculus

MAT138Y Calculus
Review of basic concepts of calculus: derivatives, integrals, the fundamental theorem, improper integrals and limits. A rigorous treatment of sequences and series: convergence tests, power

series and introduction to uniform convergence. (Similar to MAT132Y but of more substance). [52L, 52T]
Exclusion: MAT130Y/132Y/133Y/135Y/139Y/149Y
Prerequisite: Grade 13 Mathematics A, R & F, C/
MAT105Y/O.A.C. Calculus, Algebra and Geometry

MAT214H Differential Equations

Ordinary differential equations. Emphasis throughout on applications. (Suitable for non-specialists). [26L, 13T]
Exclusion: APM251Y/MAT230Y(G)/234Y/244H(G)/251Y
Prerequisite: MAT132Y/138Y
(MAT214H and 233H replace MAT235Y)

MAT228H Linear Algebra

Matrices, linear transformations, systems of linear equations, determinants, canonical forms, applications. (Of general interest). [26L, 13T]
Exclusion: MAT225Y/229H
Prerequisite: Grade 13 Algebra or C/ MAT105Y/
one O.A.C. Mathematics

MAT233H Calculus of Several Variables

Differential and integral calculus of several variables: partial differentiation, chain rule, Taylor series and classification of critical points. Multiple integrals, line and surface integrals, vector calculus, Green's theorem. (Suitable for non-specialists). [26L, 13T]
Exclusion: MAT230Y/234Y/235Y/238Y/239Y(G)/250Y
Prerequisite: MAT132Y/138Y
(MAT233H and MAT214H replace MAT235Y)

MAT234Y Advanced Calculus For Social Scientists

Sequences and series. Differential calculus for functions of several variables. Taylor series in one and many variables. An introduction to integral calculus for functions of two variables. An introduction to optimization; extremal problems. Lagrange multipliers; linear programming. Difference and differential equations emphasizing linear systems. Applications to economics and Markov chains. [52L, 26T]
Exclusion: MAT214H/230Y/233H/235Y/238Y/239Y(G)/250Y
Prerequisite: MAT132Y/138Y

MAT238Y Advanced Calculus

Real numbers. Elements of topology in R^2 and R^3 . Differential calculus of functions of several variables: the implicit function theorem, extremal problems, Lagrange multipliers. Transformations. Parametrized integrals. Integral calculus: line, surface and volume integrals. Theorems of Gauss and

Stokes. (For those with more than a casual interest in mathematics) [52L, 26T]
Exclusion: MAT230Y/233H/234Y/235Y/239Y(G)/250Y
Prerequisite: MAT138Y

MAT251Y Applied Mathematics I

Ordinary differential equations of the first order. Higher order linear differential equations and systems, infinite series, Laplace transform, Lagrangian dynamics. Applications. [52L, 26T]
Prerequisite: MAT132Y (B or better)/138Y
Corequisite: MAT238Y

MAT308H Philosophy of Mathematics

The origins of arithmetic, geometry and mechanics. (This course is, at basis, concerned with ontology but is illustrated for the most part through mathematical exercises. Required work will be through problems rather than essays). [39L]
Prerequisite: Any second year MAT course or equivalent.
Offered in alternate years.

MAT309H Introduction to Mathematical Logic

Formal languages: content as opposed to form, expressive power and inherent limitations as revealed by Gödel's theorems. [39L]
Exclusion: CSC438H
Prerequisite: MAT104H/PHL245H, MAT132Y/138Y/228H

MAT310H Set Theory: An Introduction

The mathematical theory of sets. The classical paradoxes. The concept of infinity. [39L]
Prerequisite: MAT228H/238Y
Offered in alternate years.

MAT311H Partial Differential Equations

Partial differential equations of applied mathematics, mathematical models of physical phenomena, basic methodology. [26L, 13T]
Exclusion: APM351Y, 331H, 346H, MAT351Y
Prerequisite: MAT233H/238Y, 214H/251Y

MAT328H Introduction to Differential Geometry

Curves in R^2 and R^3 : arc length, curvature, torsion, Hopf's theorem, Frenet's equations, the main theorem. Surfaces in R^3 : first and second fundamental forms, Gauss curvature and mean curvature, the Bonnet immersion theorem. [39L]
Prerequisite: MAT228H, 233H/234Y/235Y/238Y

MAT334H Complex Variables

Theory of functions in one complex variable: analytic and meromorphic functions; Cauchy's theorem, residue calculus, conformal mappings. Introduction to analytic continuation, harmonic functions. [39L]
Exclusion: MAT319H/330Y
Prerequisite: MAT238Y/250Y

MAT338H Introduction to Real Analysis

Metric spaces, completeness, uniform convergence. Topics in measure theory: Lebesgue integral, Riemann-Stieltjes integral. L^p spaces, Fourier series. [39L]

Exclusion: MAT350Y

Prerequisites: MAT228H, 238Y

MAT344H Introduction to Combinatorial Mathematics

Basic counting principles. Inversion formulas, principle of inclusion-exclusion. Generating functions. Permutations with restrictions. Graph theory and applications. [39L]

Prerequisite: MAT228H

Offered in alternate years.

MAT349H Abstract Algebra

Introduction to groups, rings, and fields. [39L]

Exclusion: MAT300Y

Prerequisite: MAT108H/228H

MAT351Y Applied Mathematics II

Hyperbolic, parabolic, elliptic partial differential equations, separation of variables, eigenfunction expansions, integral transforms, Green's functions, examples drawn from physics and engineering. [65L, 13T]

Exclusion: APM311H, 331H, 346H, 351Y, MAT311H

Prerequisite: APM251Y/MAT251Y

MAT359H Introduction to Topology

Topics selected from point-set, geometric, and algebraic topology. [39L]

Prerequisite: MAT238Y/250Y

Offered in alternate years.

MAT399H Independent Work in Mathematics

A prospective student should select his topic and advisor before the end of second year and discuss the topic with his advisor.

Prerequisite: Acceptance by an advisor

Faculty Advisor: Professor E. Kremer

The Greek words from which "philosophy" is formed mean "love of wisdom" and all great philosophers have been moved by an intense devotion to the search for wisdom. What distinguishes philosophy from the physical and social sciences is its concern not only with the truths which are discovered by means of specialized methods of investigation, but with the implications such discoveries have for human beings in their relations with one another and the world. Moreover, philosophy has an abiding interest in those basic assumptions about the nature of the physical and social world, and about the nature of inquiry itself, which underlie the methodology by means of which scientists seek to explain their observations. Philosophy examines the grounds for those beliefs which make up people's fundamental views of the world. Here are a few fundamental beliefs, some held by some people, some by others: "Telling lies is always wrong", "Some things can never be known", "The material world is all that exists", "What is right or wrong depends entirely on one's society or culture", "People are inherently selfish", "Life must have a transcendent purpose". There are many other similar beliefs which deeply affect the way we think and live. Philosophers discuss them as thoroughly and systematically as possible.

The Philosophy Department offers courses which study basic works of famous philosophers of the past taken in their historical settings, and it offers courses in which students are trained to think critically about philosophical issues themselves. A glance through the courses offered in Philosophy will inform any prospective student of the names of philosophers studied, and the special areas investigated in the Philosophy programmes at the University of Toronto. A dictionary or encyclopedia will supply the standard definition of logic, ethics, epistemology, and metaphysics. But one who wants to know what philosophy is must do it. A student can learn a great deal from a study of what has been written by the great philosophers through history. But such study is only an important preliminary. To read without bold and critical thinking is next to useless.

Some students may not wish to undertake more than a few courses in philosophy to supplement their work in other fields. They may make a free choice among the courses offered by the Department. The only restrictions are that they take no more than one 100 level course and that 300 and 400 level courses presuppose previous work in philosophy. Courses at the 200 level are open to all students who have completed at least four full courses and to those with fewer than four full courses completed who are taking (or have taken) a 100 series course in philosophy. Many students will find that their interests embrace phi-

losophy and some other subject. The Philosophy Department has joint programmes with various departments. Other students will find that their primary interest is in philosophy. The Specialist Programme is designed for such students. Its completion may be a step toward graduate study in philosophy, or it can lead in other directions; law, journalism, education, theology, and politics are some possibilities. It cannot be stressed too strongly, however, that one of the chief rewards of studying philosophy must always be intrinsic to the subject itself.

ERINDALE PHILOSOPHY HANDBOOK. Because of space and time restrictions, the Calendar gives only brief and abstract descriptions of courses. The Philosophy Handbook, which is produced in the Spring, gives detailed information on course outlines, requirements, readings, instructors, time-tabling, etc. It is available at the Philosophy Department, Room 227 North Building, phone 828-5296, or will be mailed on request. It is an essential supplement to the Calendar and students are urged to consult it.

The Philosophy Discipline Representative and staff will be glad to offer advice and assistance. To arrange for counselling by a faculty member, phone 828-5349.

Please see Section 7 for details of Programme Requirement.

PHL100Y Logic, Knowledge, and Reality

An introduction to philosophy, emphasizing logic, theory of knowledge, and metaphysics. Elementary techniques of modern symbolic logic and problems in inductive logic and probability. What can be known with certainty? What is reality? Are there limits to knowledge? [78L]

Exclusion: PHL101Y, 102Y, PHI103Y(G), 104Y(G), 105Y(G)

PHL101Y Mind, Value and Religion

An introduction to philosophy, stressing conceptions of human nature and of the good life. The religious dimension of life; arguments for the existence of God; free will; mind and body in relation to the scientific image of human nature; the rational foundation for morality; the relation of individual to state; authority, liberty, and justice. [78L]

Exclusion: PHL100Y, 102Y, PHI103Y(G), 104Y(G), 105Y(G)

NOTE: All 200 series courses, with the exception of PHL245H, have the prerequisite that the student have completed at least four full courses (or the equivalent) at the University. This prerequisite is waived for students who are taking (or

have taken) a 100 series course in Philosophy. There are no other prerequisites for any 200 series courses.

PHL200Y Birth of Western Philosophy

Classical doctrines of Plato and Aristotle concerning the universe and God, human knowledge and logic, soul and body, moral values and the good life. Plato's predecessors, the pre-Socratics and Socrates, and post-Aristotelian developments in Stoicism, Epicureanism and neo-Platonism. [78L]

Recommended preparation: PHL100Y/101Y
Exclusion: CLA200Y

PHL210Y 17th and 18th Century Philosophy

Classic texts by European philosophers (e.g., Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant). Their attitudes toward science and religion, and their theories about the nature of the world and of human knowledge, culminating in the "Copernican Revolution" of Kant. [78L]

Recommended preparation: PHL100Y/101Y

PHL235H Philosophy of Religion

The nature of religion; religious faith; arguments for God's existence; religious experience; religion and human autonomy; the problem of evil; religious and atheistic existentialism. [39L]

PHL241H Philosophy of the Emotions

Typical problems studied: Can emotions be assessed as rational or irrational? Do we have immediate knowledge of our emotions? Are emotions right or wrong in themselves? Are we responsible for them? How do our socialized emotional repertoires condition our conception of ourselves, including our gender identity? Do they encourage harmful stereotypes? [39L]

PHL242H Minds and Machines

Can machines think and feel? Are human beings simply very complicated organic machines? These questions are discussed in the light of recent work on the simulation of intelligence and purposive behaviour. [39L]

PHL243H Philosophy of Human Sexuality

Philosophical issues about sex and sexual identity in the light of biological, psychological, and ethical theories of sex and gender. The concept of gender; male and female sex roles; theories of psycho-sexual development; sexual morality; "natural", "normal" and "perverse" sex; sexual liberation; love and sexuality. [39L]

PHL244H Human Nature

Theories of human nature, e.g., psychoanalysis, behaviourism, sociobiology. Current issues, e.g., egoism and altruism, instincts, I.Q., rationality, sanity and mental illness. [39L]

PHL245H Modern Symbolic Logic

The application of symbolic techniques to the assessment of arguments. Propositional calculus and quantification theory. Logical concepts; techniques of natural deduction. [39L]

Exclusion: MAT104H

PHL246H Probability and Inductive Logic

The elements of axiomatic probability theory, and its main interpretations (frequency, logical, subjective). Reasoning with probabilities in decision making and science. [39L]

Recommended preparation: PHL100Y/245H

PHL255H Science and Pseudo-Science

An examination of (e.g.) ESP, astrology, race and I.Q., scientific creationism, psychoanalysis, sociobiology; the principles of good science as opposed to pseudo-science, especially in "border-line" cases; misuses of science. [39L]

PHL271H Ethics and the Law

Moral issues in the law, such as civil liberties and police powers, censorship, civil disobedience, the death penalty, inequality, paternalism, and the constitutional protection of human rights. Case studies from Canadian law. [39L]

PHL272H Philosophy of Education

The nature, aims, and content of education; learning theory; education and indoctrination; the teaching of morals and the morality of teaching; the role and justification of educational institutions, their relation to society and to individual goals; authority and freedom in the school. [39L]

PHL274H Contemporary Social Issues

Against the background of some major social and political theories, this course will explore such practical problems as nationalism, racism, sexism, inequality, revolution, and political radicalism. [39L]

PHL277Y Moral, Social, and Political Philosophy

A survey of some major moral and political theories, e.g., utilitarianism, rights theory. A study of central issues in moral philosophy, e.g., moral relativism, the nature and limits of moral responsibility, self-interest and morality, and central issues in social and political philosophy, e.g., anarchy and the

legitimacy of the state, the evaluation of forms of government, civil disobedience and revolution. [78L]

Exclusion: PHL265H, 275H, 276Y

Recommended Preparation: PHL100Y/101Y

PHL281H Morality, Medicine, and the Law

Moral implications of recent developments in medicine and the life sciences; related legal and social issues. Euthanasia, health care priorities, abortion, fertility control, against the background of some major ethical theories. [39L]

PHL285H Aesthetics

Some central areas in philosophy of art such as the nature of a work of art; definitions and theories of arts, aesthetic experience, perception and sensibility; objectivity in criticism; standards of taste or evaluation. [39L]

PHL288H Literature and Philosophy

The literary expression of philosophical ideas and the interplay between literature and philosophy. [39L]

PHL295H Philosophy of Business

Philosophical issues in ethics, social theory, and theories of human nature insofar as they bear on contemporary conduct of business. Issues include: Does business have moral responsibilities? Can social costs and benefits be calculated? Does modern business life determine human nature or the other way around? Do political ideas and institutions such as democracy have a role within business? [39L]

NOTE: All 300 series courses, with the exception of PHL 344H-347H, have a prerequisite of three half-courses (or the equivalent) in Philosophy. It is strongly recommended that students prepare for 300 series courses by taking two of the following: PHL100Y/101Y, 200Y, 210Y, 245H, 277Y.

Some 300 series courses have specific prerequisites or recommended preparation, as described below. Students who do not meet the prerequisite for a particular course but believe that they have adequate preparation should consult the instructor concerning entry to the course.

PHL300H Topics in Ancient Philosophy

A study of some topic or thinker in the ancient period. [26S]

Recommended preparation: PHL200Y/210Y

PHL307H Topics in Mediaeval Philosophy

A study of some of the principal figures and intellectual problems in the period from the first century to the sixteenth. Figures such as Philo, Augustine, Abelard, Avicenna, Maimonides,

Aquinas, Duns Scotus, Ockham and Suarez will be studied on topics in metaphysics, epistemology, ethics and philosophy of nature. [26S]
Exclusion: PHL205Y(G)
Recommended preparation: PHL200Y/210Y

PHL309H Topics in Modern Philosophy
A study of some topic or thinker in the modern period. [26S]
Exclusion: PHL310H(G), PHL311H(G)
Recommended preparation: PHL200Y/210Y

PHL312H Kant
A systematic study of *The Critique of Pure Reason*. [26S]
Recommended preparation: PHL210Y/309H

PHL317H Topics in Nineteenth Century Philosophy
A study of some topic or thinker in the 19th century. [26S]
Exclusion: PHL315H(G), 316H(G)
Recommended preparation: PHL210Y/309H/312H

PHL324H The Continental Tradition
A study of some of the principal figures and intellectual problems in twentieth-century existentialism and phenomenology. [26S]
Exclusion: PHL320H(G), 321HG)
Recommended preparation: PHL210Y/309H/312H/317H

PHL325H The Analytic Tradition
Analytic philosophy up to 1945. Authors include Frege, Russell, Moore, Wittgenstein, and logical positivists such as Ayer. [26S]
Recommended Preparation: PHL245H

PHL332H Issues in Metaphysics
Typical problems: ontological categories; ontological commitment; the objectivity of space and time; causality and determinism; mind and body. [26S]
Exclusion: PHL330Y(G)

PHL333H Issues in Epistemology
Typical problems: knowledge and belief, perception, the analytic-synthetic distinction, theories of truth, necessity and the *a priori*. [26S]
Exclusion: PHL330Y(G)

PHL340H Issues in Philosophy of Mind
Typical problems: the brain-mind identity theory; intentionality and the mental; personal identity; the nature of human action. [26S]

PHL341H Freedom, Responsibility, and Human Action
Human action and the nature of freedom and responsibility in the light of contemporary knowledge concerning the causation of behaviour. [26S]

PHL344H Metalogic
Soundness and completeness of propositional and quantificational logic, undecidability of quantificational logic, and other metalogical topics. [39L]
Exclusion: MAT304H
Prerequisite: PHL345H and one full course equivalent in PHL/MAT/CSC

PHL345H Intermediate Logic
A sequel to PHL245H, developing skills in quantificational logic and treating of definite descriptions. The system developed will be used to study a selection of the following topics: philosophical uses of logic, formal systems, set theory, non-classical logics, and metalogic. [39L]
Prerequisite: PHL245H and one full course equivalent in PHL/MAT/CSC

PHL346H Philosophy of Logic and Mathematics
Platonism versus nominalism, the relation between logic and mathematics, implications of Gödel's and Church's theorems, counterfactuals, necessity and possibility, extensional and intensional contexts, intuitionism. [26S]
Exclusion: MAT308H
Prerequisite: PHL245H/MAT104H and one full course equivalent in PHL/MAT/CSC

PHL347H Many-Valued and Modal Logics
Many-valued and modal propositional logics and their interrelations; logical matrices and possible-world semantics; problems of interpretation and philosophical applications. [39L]
Exclusion: MAT312H
Prerequisite: PHL245H and one full course equivalent in PHL/MAT/CSC
Recommended preparation: PHL345H

PHL350H Philosophy and Theories of Language
The claims of logical positivism, ordinary language philosophy, structuralism, or generative linguistics about the importance of language for philosophy; hypotheses about mind, metaphysics, and meaning. [26S]
Recommended preparation: PHL245H

PHL351H Language and Logic
The sense – reference distinction; the theory of descriptions; model languages, the relation between theory of truth and theory of meaning, the semantics of modal notions. Readings include Frege and Russell. [26S]
Prerequisite: PHL345H and one full course equivalent in PHL/MAT/CSC

PHL356H Philosophy of Science
An investigation of the structure and methods of natural science and social science. Topics include: explanation, methodology, realism and ob-

jectivity, and the structure of theories such as relativity, Freudianism, or evolution. [26S]
Exclusion: PHL355H(G)
Recommended preparation: PHL245H

PHL365H Contemporary Political Philosophy
A study of some of the best recent work by political philosophers on topics such as justice, rights, welfare, and political authority. [26S]
Recommended preparation: PHL277Y

PHL370H Issues in Philosophy of Law
Major issues in philosophy of law, e.g., responsibility and punishment, the obligation to obey the law, legal positivism, law and morality. [26S]
Recommended preparation: PHL271H/277Y

PHL373H Moral Education
A study of moral development, moral and values education and the moral and social implications of the teaching of morals. Topics will be examined against the background of some major theories in moral philosophy. [39L]
Recommended preparation: PHL277Y

PHL375H Contemporary Moral Philosophy
A study of some of the best recent work by moral philosophers on topics such as the objectivity of values, rights and duties, utilitarianism, and the nature of moral judgments. [26S]
Recommended preparation: PHL277Y

PHL395H Special Seminar in The History of Philosophy
An intensive study of some historical figure, theme or period. Topic to vary from year to year. [26S]

NOTE: Prerequisite for all 400 series courses is permission of the instructor. This will normally be given only where nine half-courses (or the equivalent) in Philosophy have been completed.

PHL495H Senior Seminar in Philosophy
A seminar for advanced students in Specialist and Major Programmes in Philosophy. Topic to vary from year to year. [26S]

PHL496H/497H/498H/499H Individual Studies

Faculty Advisor: Professor H.W. Taylor
Physics was born of a desire to understand nature in a quantitative way. Guided by experiment and intuition, physicists arrive at mathematical relationships among various quantities. These relationships are then tested experimentally and extended by further research. The physics courses offered at Erindale are designed to help students both to understand and to use the concepts and relationships which have been developed, and to appreciate the need for continual questioning of scientific theories. The non-science student should gain insight into the nature of scientific investigation, while the student whose interest is in sciences other than physics should acquire a background knowledge leading to a deeper understanding of his own discipline. Students intending to specialize in physics will meet a broad programme of courses which will prepare them for advanced study.

The present programme in Physics at Erindale College employs the most up-to-date demonstration apparatus and undergraduate facilities. It has been designed to meet the diverse needs of the science students of the College. Students wishing to specialize in physics should consult a physics professor.

Recommended first-year programme:

- i) for science and physics specialists PHY140Y, MAT138Y, (MAT132Y may be acceptable for some programmes) MAT228H
- ii) for general interest, pre-meds, etc. PHY120Y/132Y; MAT132Y/138Y

Second Course in Physics:

PHY221H and PHY222H are recommended for students in Biology. PHY218H and PHY219H are recommended for students in Survey Science, and, in general, anyone who wishes second courses in Physics.

Please see Section 7 for details of Programme Requirement.

PHY120Y Physics for Life Science Students
This course presents an overview of physics for life science students beginning with its classical foundations and continuing through to the challenges of the future. Selected applications to medical and biological systems will be discussed. Topics include: Vector kinematics and dynamics of particles; force, torque and angular momentum vectors; special relativity; equilibrium conditions for rigid bodies; rotational dynamics; work and energy; conservation laws; fluids and fluid flow; elasticity; simple harmonic motion; ideal gases; introductory thermodynamics; electricity and magnetism; nuclear and elementary particle physics.

Note: Students lacking the equivalent of grade 13

Physics may enrol in this course with the permission of the instructor. [78L, 39P, 26T]

Exclusion: PHY132/140Y

Prerequisite: Grade 13 Mathematics, R&F/A, Calculus, Physics.

Corequisite: MAT132/138Y.

PHY132Y World of Physics

Recommended for students interested in a general survey course in physics. An overview of physics is presented starting from its classical foundations, through its evolution to the present and on to some of the challenges which lie ahead. Topics include: kinematics and dynamics of particles; special relativity; forces; work and energy; conservation laws; electricity and magnetism; nuclear and elementary particle physics.

Note: Students lacking grade 13 Physics may enrol in this course with the permission of the instructor. [78L, 39P, 26T]

Exclusion: PHY120Y/140Y

Prerequisite: Grade 13 Mathematics, R&F/A, C, Physics

Corequisite: MAT132Y/138Y

PHY140Y Principles of Physics

Recommended for all students who wish to become professional scientists. It is also the first course in the Physics Specialist Programme. Emphasis is placed on methods of constructing appropriate physical models and the development of problem solving skills. Topics include: Newtonian mechanics; special relativity; gravitational, electric and magnetic forces and fields; rigid body motion; properties of materials; propagation and reflection of mechanical waves; heat transport and electrical conductivity; the breakdown of classical physics. [78L, 39P, 26T].

Exclusion: PHY120Y/132Y

Prerequisite: Grade 13 Physics, Grade 13 Mathematics, R&F, C, A

Corequisite: MAT132Y/138Y

Recommended preparation: Good standing in Grade 13 physics and mathematics, including algebra

PHY218H Applied Electromagnetism and Electromagnetic Waves

Electrostatics, conduction, magnetism, magnetic force, induced currents, introduction to Maxwell's equations and radiation. Electromagnetic waves, velocity of light, light sources, lasers, reflection, refraction, diffraction, interference, telescopes, cameras, optical transmission systems. Examples selected from applied physics and engineering. [26L, 13T]

Exclusion: PHY221H, 240Y

Prerequisite: PHY120Y/132Y/140Y

PHY219H Introduction to Electronics

Resonance in AC circuits, diodes, rectification, semiconductors, transistors, linear amplifiers, oscillators, introduction to integrated circuits. Applications to data processing. [26L, 18P]

Prerequisite: PHY218H/221H/240Y

PHY221H Electromagnetism and Optics for Life Science Students

Electrostatics, electromotive forces, conduction, the electrical activity of nerves, magnetism and magnetic forces, magnetically induced currents, alternating currents, resonance, wave generation, waves in fluids, sound and hearing, light waves, reflection, refraction and lenses, optical microscopes, diffraction, interference, vision and the eye. Emphasis on application to biological systems. [26L, 13T]

Exclusion: PHY218H, 240Y

Prerequisite: PHY120Y/132Y/140Y

PHY222H Atomic and Nuclear Physics and Applications in the Life Sciences

Atomic properties of matter, quantum numbers, energy levels, photoelectric effect, the electron microscope, x-rays, absorption of radiation, radioactivity and radioactive decay, nuclear radiation physics. [26L, 13T]

Prerequisite: PHY120Y/132Y/140Y

PHY224H Techniques of Physical Measurement

A course designed to familiarize students with some of the basic laboratory measurement techniques used in pure and applied physics. During this course, students will apply these techniques to experiments in a number of different fields in physics. [26L, 78P]

Prerequisite: PHY132Y/140Y/CHM150Y

Corequisite: Any 200 level PHY course.

PHY240Y Electromagnetism

An introductory course in electricity and magnetism. Topics include: Gauss's Law and electrostatics; DC circuits and instruments; AC circuits and resonance; magnetostatics and Faraday's Law; introduction to Maxwell's equations; electromagnetism in material media. Vector analysis will be introduced as required and a working knowledge of calculus and elementary differential equations is assumed. [52L, 26T]

Exclusion: PHY218H, 221H

Prerequisite: PHY132Y (with a minimum of 70% & P.I.)/140Y, MAT132Y/138Y

PHY257H Quantum and Statistical Mechanics I

A first course covering the development of basic concepts of quantum and statistical mechanics. Topics include: historical experiments, introduction to Hilbert space; wave mechanics (including the

deBroglie hypothesis and the Schroedinger equation), simple quantum mechanical systems, statistical uncertainty, entropy and temperature, the laws of thermodynamics, macroscopic systems at constant temperature, the Planck distribution for photons in black-body radiation. [26L, 13T]
Prerequisite: PHY132Y (70% and P.I.)/PHY140Y, MAT132Y/138Y
Corequisite: (MAT233H/238Y) and (MAT214H/MAT251Y)

PHY258H Quantum and Statistical Mechanics II
A continuation of PHY257H designed particularly for students intending to specialize in the Physical Sciences. Topics include: Thermodynamics of open systems, spin and statistical distribution functions, the Fermi-Dirac distribution, Boson physics, reversibility and irreversibility, classical thermodynamics, interacting particles, the postulates of quantum mechanics, matrix formulation, the harmonic oscillator, angular momentum. [26L, 13T]
Prerequisite: PHY257H

PHY325Y Quantum Physics Laboratory
An introduction to modern physics through a set of selected experiments. Topics include: laser physics, optical interferometers, atomic spectroscopy, microwave optics, absorption of gamma rays, nuclear coincidence counting, gamma ray spectroscopy, X-ray quantum physics, nuclear magnetic resonance, field emission of electrons, ferroelectric hysteresis. At the end of the course, students are required to take a short oral examination based on the experiments they have completed. [156P]
Prerequisite: PHY224H, 240Y

PHY326H Quantum Physics Laboratory
This course is one-half of PHY325Y. [78P]
Exclusion: PHY325Y
Prerequisite: PHY224H, 240Y

PHY332H Applications of Quantum Mechanics
This course continues the development of the basic foundations of Quantum Mechanics begun in PHY257H and 258H and applies these ideas to a number of physical phenomena. Topics include the Schroedinger equation, wave packets, uncertainty principle, commutation relations, orbital and spin angular momentum, addition of angular momenta, the hydrogen atom, one-electron and multi-electron atoms, perturbation theory. [26L, 13T]
Prerequisite: PHY240Y, 257H, 258H
Corequisite: MAT351Y/311H

PHY333H An Introduction to Classical and Continuum Mechanics

This course introduces the student to more advanced problems and formulations in mechanics. An attempt is made to help the student see similarities and differences in microscopic and macroscopic viewpoints, as problems involving both classical and continuum mechanics are considered. [26L, 13T]
Prerequisite: PHY257H, (MAT214H and 233H)/239Y

PHY334H Radiation, Fields and Matter

This course presents an overview of the theory of electromagnetic fields and radiation, together with selected applications. Students should be familiar with electrostatics, magnetostatics, and the derivation and interpretation of Maxwell's equations. Propagating, non-propagating and guided wave solutions and their interactions with dielectric boundaries will be discussed. Multipole radiation fields will be analyzed. Reference will also be made to the phenomenon of birefringence in non-cubic crystalline media, and simple models of optical dispersion. Selected topics such as superconductivity, relativistic effects, and optical diffraction may also be discussed. [26L, 13T]
Prerequisite: PHY218H/231Y/240Y

JGP334H Physics of the Earth

The course deals with the quantitative physical description of the Earth: its dynamics, internal structure and tectonic history. Topics covered in detail are radioactivity and radiometric dating of rocks, the Earth's rotation and dynamics of it's gravitational and magnetic fields, ancient magnetic fields, and seismological evidence for the internal structure and composition of the Earth. Extensive use is made of potential field methods and solution of partial differential equations. [26L, 13T]
Prerequisite: PHY218F, 221F, 240Y
Recommended preparation: GSC120H

PHY470Y Introduction to Research in Physics

An experimental or theoretical research problem under the supervision of a member of the Physics staff. By special arrangement, this research problem may be started during the summer before the student enters his final year.
Prerequisite: Permission of Physics Faculty Advisor

PHY471Y Supervised Readings

A programme of individual study chosen by the student with the advice of, and carried out under the direction of, a staff member. A student may take advantage of this course either to specialize further in a field of interest, or to explore interdisciplinary fields not available in the regular syllabus.
Prerequisite: Permission of Physics Faculty Advisor

Faculty Advisor: Professor R.S. Beiner

Political science is the study of politics and government. In general, politics are the ways in which the decisions are made about who is to rule in a society and what laws and policies are to prevail within its physical boundaries, while government is the process by which general rules are carried out. Part of political science is given over to describing specific processes or events – for example, a particular Canadian party leadership convention or such Canadian conventions generally – in somewhat the same way as a biologist would describe something in physical nature. But political science will go from these particularities to generalizations. One may describe political violence in contemporary Canada within the framework of an analysis of violence in countries similar to ours or, even more generally, in all societies both past and present. The study of politics at Erindale deals not only with how politics and government *do* proceed but how they *should* be carried on in the light of a long tradition of political philosophy. Thus students will be introduced in some courses to such questions as: What tests do we apply to determine whether one kind of government is better than another? Who should rule? Under what conditions, if any, have people a moral obligation to disobey government? In spite of its fascination for many people, political science is a demanding study. This is so partly because its subject-matter is very complex. But more than that, we all bring to political science opinions about what is and what ought to be which we have accepted uncritically. Here are some questions to which most people would give ready answers:

- 1) are totalitarian nations more likely than democratic countries to have aggressive foreign policies?
- 2) is it desirable that governments should not try to "legislate morality"?
- 3) are we more likely to control environmental pollution if we vest powers over such matters in larger rather than smaller units of government?

Although most of us would be willing to make snap judgments about such questions as these, each is very complex and our opinions are probably no better founded than are those of non-experts about, say, the law of relativity or the causes of the common cold. The study of political science will not eliminate political prejudices and is not directed toward eliminating political convictions; at a minimum, it gives a person more ability than he has otherwise, to give an account of the basis of his beliefs, both about what the political world is, and what it can and should be.

Students are urged to consult the Erindale Political Science Handbook and the Political Science Undergraduate Handbook (available in the Political Science office, Room 34 Crossroads Build-

ing), both of which are published in the Spring, for detailed information on course offerings. Students contemplating taking either 300 or 400 series courses in Political Science at the St. George Campus are advised to consult either the Discipline Representative or the Undergraduate Secretary of the Department (978-3340) about balloting procedures.

Please see Section 7 for details of Programme Requirement.

POL100Y Introduction to Canadian Politics

A study of the political process in Canada, including Canadian political culture, the formation of public opinion, political behaviour, political parties, the constitution, federalism, French Canada, federal-provincial financial relations, and the structure and functioning of political institutions, such as the cabinet, parliament, the judiciary, and the public service. [52L, 26T]

POL104Y Foreign Political Institutions

Foreign political movements and forms of government relevant to twentieth-century politics; Presidential government (United States); Parliamentary systems (France and Germany); Soviet Communism, and Nazi Germany. [52L]

POL200Y Political Theory

The development of political thought to the 17th century. Among the theorists examined are Plato, Aristotle, Machiavelli, Hobbes and Locke. [52L]

POL203Y Politics and Government of the United States

A comparative study of the development of American government and the main elements of the American political tradition; the structure and functioning of executives, legislatures, courts, bureaucracies, parties, and pressure groups in federal and state government; characteristic processes of American politics such as voting, bargaining, and regulation; and resultant patterns of public policy. [52L]

POL204Y Politics and Government of the U.S.S.R.

Historical development of the Soviet political and economic system; the leadership, party, public administration, political socialization, interest groups, dissent. [52L]

POL208Y Introduction to International Relations

The contribution of the individual, the group, the nation, the state, and the international system to conflict and conflict management in the nineteenth and twentieth centuries, and an examination of the problems of equity and justice in the contemporary international system. [52L]

POL209Y Public Administration and Public Policy in Canada

(Formerly POL307Y)

Combines a study of the organization, processes and issues in Canadian public administration with a study of the institutions and processes involved in policy making. Also focuses on the study of specific policy areas including some of the following: economic policy, social welfare, regional disparities, and industrial development. [52L]

Prerequisite: COM102H/103H/POL100Y/102Y

POL211Y Canadian Political Parties

(Formerly POL311Y)

The role and functioning of Canadian political parties, intra-party structures and processes, political culture and ideas, federal and provincial party systems, elections and voting. [52L]

Prerequisite: POL100Y

Offered in alternate years.

POL221H Political Participation

How and why do people get involved in politics?

An examination of the behaviour of the ordinary citizen in Canada and the United States. Topics to be considered include: the development of mass democracy; the form and extension of popular participation; elections and voting behaviour; political protest movements. [26L]

POL222H Elites and Political Leadership

An introduction to the study of political leadership and the exercise of political power. Topics will include the relationship of political leaders to the non-political elites in society, the cohesiveness and responsiveness of political leadership, the turnover of elite personnel, and the characteristics and processes of decision-making. [26L]

Prerequisite: POL221H/one other POL course

POL302Y Politics and Government of Western Europe

Common features of political life in Western Europe and the particularities of such countries as West Germany, Italy, Britain, and France. Historical development of patterns of political opposition; relationships between social cleavages, party systems, political leadership, public policy. [52L]

POL308Y Urban Politics

A comparative course dealing with Urban Politics in Canada, Britain and the United States. It will deal with governmental structure, political issues, and the political process in urban areas. A major element will be a research paper on some aspect of politics in the metropolitan Toronto area.

[52L, 13T]

POL309Y The State in Planned and Market Economies

(Formerly POL214Y)

Examines the principal theoretical arguments of Liberalism, Marxism and Democratic Socialism; major differences within the Liberal and Marxist traditions as well as between them; the historical development and current problems of planned and market economies; the rule of law, politics, and the potential for democratic control in both capitalist and socialist societies. [52L]

Prerequisite: POL100Y/102Y/ECO100Y

POL312Y Canadian Foreign Policy

A theoretical and historical view of Canada's external relations; the Canadian foreign policy process, including policy approaches, government decision-making, domestic and external processes and instruments, techniques and bargaining; relations with the United States, Europe and the outer world; foreign policy in the diplomatic, military, economic and cultural sectors. [52L]

Prerequisite: POL208Y

POL314Y Public Opinion and Voting

An examination of the nature of political attitudes and opinions, the processes by which they are acquired, their use in describing political culture, and the role of opinions and attitudes as explanations of individuals' voting choices. Research on Canadian politics will be discussed in comparison with studies in other countries. [52L]

POL316Y Contemporary Canadian Federalism

Constitutional, political, administrative, and financial aspects of federal-provincial relations, regionalism and cultural dualism. [52L]

Prerequisite: POL100Y

Offered in alternate years.

POL317Y Comparative Public Policy and Administration

(Formerly POL207Y)

Major theories and concepts in the fields of public administration and public policy, drawing on the experience of Canada and other advanced industrialized nations. [52L]

Exclusion: POL207Y

Prerequisite: POL100Y/102Y/104Y/203Y/205Y/209Y

POL320Y Modern Political Thought

The development of political thought in the 18th and 19th centuries, including Rousseau, Burke, Hume, Kant, Hegel, the English Utilitarians (Bentham and J.S. Mill), Marx, and Nietzsche. [52L]

Prerequisite: POL200Y

POL327Y Comparative Foreign Policy
Comparative study of the foreign policies of the Soviet Union, the United States, Great Britain, France, and Germany.
Prerequisite: POL208Y

POL328Y International Organization
A weekly two-hour lecture concerned with the development, structures, and functions of international organizations. The emphasis is on the political impact of international organizations and international law in international relations. Attention will be focused on the two universal political organizations, the United Nations and its forerunner, the League of Nations. Other international organizations will also be considered. [52L]
Prerequisite: POL208Y

POL329Y Marxism
A survey of Marxist political thought dealing with Marx and Engels; the German Social Democrats; Lenin, Trotsky and the Russian revolution; Maoism; problems of contemporary communism. [26L, 26S]
Prerequisite: A course in political theory or philosophy

POL331H Ontario Government and Politics
Political structures and processes in Ontario; Cabinet government; the interaction of Cabinet, Legislature and public service; political parties and the party system; provincial-municipal relations. [26L]
Prerequisite: POL100Y
Offered in alternate years.

POL333Y Comparative Provincial Politics
(Formerly POL333H)
Parties and party systems, elections, voting behaviour, political culture, administrative machinery, decision-making processes and institutions, similarities and differences in public policy. [52L]
Prerequisite: POL100Y

POL340Y International Law
International law as an instrument of conflict resolution. Recognition, sovereign immunity, subjects of international law, and jurisdiction are some of the subjects examined. [52L]
Prerequisite: POL208Y

POL440Y Politics and Governments of Eastern Europe
A comparative analysis of eight Communist states: Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and Yugoslavia.
Prerequisite: Permission of Instructor

POL446Y 20th Century Political Thought
An interpretive study of central themes and issues. Representative thinkers: Nietzsche, Weber, the Frankfurt School, Camus, Arendt, Strauss. [52S]

POL459Y The Military Instrument of Foreign Policy
The relationship of military force to politics; Nuclear war and deterrence, conventional war, revolutionary war and counter-insurgency are examined from the perspectives of the U.S., the U.S.S.R. and other contemporary military powers. [52S]
Prerequisite: POL208Y and permission of the Instructor.

POL495Y Undergraduate Reading Course
A reading course in which the written component will be agreed upon between the student and instructor.
Prerequisite: Permission of Instructor and Assistant Chairman

Faculty Advisors: Professors A. Fleming and R. Abramovitch

Psychology is the science that examines the structure and organization of behaviour in animals and man. It is concerned with the means by which behaviour is acquired and explores the mechanisms of adaptation to the social and physical environments. Emphasis is on cognitive, social, physiological, genetic, and other factors which determine or affect behaviour. Among the topics covered by psychology courses are developmental changes in behaviour, learning, the structure and organization of the senses, modes of perceiving and responding, the environment and genetic events which shape behaviour, the origins and implications of drives, motives, conflicts, and emotions, and the wide variety of individual and species differences which are produced by differences in genetic endowment, physiology, and past experience.

Because of the demands of science for rigor and objectivity, stress is given to the techniques by which behaviour is studied. Because psychology is the science of the behaviour of all organisms, the discussion of animal behaviour constitutes an important part of many psychology courses. An intensive examination of research findings is paramount in all psychology courses.

Students who are interested in psychology as a career must be prepared for several years of graduate study. Persons who hold a Ph.D. in psychology find employment in universities, research institutes, mental hospitals and clinics, government agencies, and large corporations. A few work as self-employed consultants or therapists. The B.Sc. with a concentration in psychology is not in itself a professional qualification. People holding bachelor's degrees in psychology typically find employment in a wide variety of business, technical, educational, or social-service areas. However, further formal or on-the-job training is usually required. Nevertheless, undergraduate courses in psychology may be valuable to students planning various professional careers in medicine, law, nursing and education for example.

NOTE: P.I. (Permission of Instructor) is obtained by balloting in Room 3030 prior to 15 August for both Fall and Spring courses or prior to the first class for Summer courses.

(*) Courses designated by an asterisk require that the student arrange a faculty supervisor during the preceding term and ballot as well. Students may take no more than the equivalent of four "project" or "thesis" half courses.

Please see Section 7 for details of Programme Requirements.

PSY100Y Introductory Psychology

Psychology is the science of behaviour, and the course seeks to acquaint the student with the scientific method as it is applied in attempts to understand both human and animal behaviour. This course is a prerequisite for all other psychology courses, except PSY201H and PSY202H. [52L, 26T]

PSY201H Research Design and Analysis in Psychology I

Basic descriptive and inferential statistics. [26L, 26T]

Exclusion: Any concurrent or previous statistics course

Prerequisite: Any OAC Math/MAT105Y/P.I.

PSY202H Research Design and Analysis in Psychology II

Concerned with the design of experiments and the more advanced methods of statistical analysis, including complex analysis of variance. [26L, 13T]

Exclusion: Any concurrent or previous statistics course except PSY201H

Prerequisite: PSY201H, P.I.

PSY210Y Introduction to Development

A survey of the scientific study of the behaviour of children. Topics include historical and philosophical background, methods and theories, and research on particular aspects of behavioural development. [78L]

Prerequisite: PSY100Y

PSY220Y Introduction to Social Psychology

A survey of contemporary areas of research in social psychology. Areas to be considered include social perception, attitudes, interpersonal relations, group processes, and ethnic attitudes. [78L]

Prerequisite: PSY100Y

PSY230H Introduction to Personality

A survey of theories of personality, focusing on its formation and components, and an evaluation of the empirical status of each theory according to the current research literature. [39L]

Prerequisite: PSY100Y

PSY252H Animal Behaviour

A study of the social behaviour of organisms as observed and measured in both laboratory and field settings. The evolution and mechanisms of the behaviour of a variety of animals will be examined. Emphasis will be placed on the similarities and differences between species in such behaviours as courtship, mating, parental care, feeding, aggression, and other social behaviours. [39L]

Exclusion: BIO318Y

Prerequisite: PSY100Y

PSY260H Introduction to Learning

A survey of empirical findings and theoretical interpretations relevant to the scientific study of the phenomena of learning and memory in human and animal subjects. [39L]

Prerequisite: PSY100Y

PSY270Y Introduction to Cognitive Psychology

A systematic investigation of thought processes and mechanisms underlying them. Topics include memory, problem solving, language and attention. [78L]

Prerequisite: PSY100Y

PSY280Y Perception

Emphasizes seeing and hearing. The ways the processing systems work in humans and lower animals. Visual perceiving of shape, space, motion, and colour. Auditory perceiving of simple and complex sounds, location, speech. Focus is on the perceiver as seeker and user of information. [78L]

Prerequisite: PSY100Y

PSY290Y Introduction to Physiological Psychology

An introduction to the study of the neural and endocrinological bases of behaviour, including aspects of normal and abnormal neural and cognitive development. [78L]

Prerequisite: PSY100Y

PSY303H (*) Individual Project

Designed for students desiring to pursue independent research into a specific aspect of human or animal behaviour.

Prerequisite: PSY201H, 309H/a laboratory course, P.I.

PSY304H (*) Individual Project

Designed for students desiring to pursue independent research into a specific aspect of human or animal behaviour.

Prerequisite: PSY201H, 309H/a laboratory course and P.I.

PSY309H Experimental Design and Theory

Problems involved in research design and the interpretation of experimental findings; the logical structure of psychological theories. Practice in the critical evaluation of research designs. [39L]

Prerequisite: PSY100Y, 201H

PSY311H Social Development

A survey of contemporary research and theory in various aspects of social development such as moral development, sex-role development, aggression, pro-social behaviour. [39L]

Prerequisite: PSY210Y

PSY314H Perceptual Development

A survey of current research in auditory and visual abilities in infancy and childhood. [39L]

Exclusion: PSY312H(G)

Prerequisite: PSY210Y/280Y

PSY315H Cognitive Development

A survey of contemporary research and theory in the development of language, thinking and intelligence, focusing on Piaget's views. [39L]

Exclusion: PSY312H(G)

Prerequisite: PSY210Y/260H/270Y

PSY316H Early Social Behaviour

An examination of research on topics such as attachment, dependency, and peer relations in infants and young children. [39S]

Prerequisite: PSY210Y, P.I.

PSY319H Developmental Psychology Laboratory

Readings, laboratory exercises and research projects designed to acquaint the student with methodology appropriate for infant and child study. [39P]

Prerequisite: PSY201H, 210Y, P.I.

PSY320H Social Psychology: Attitudes

Intensive study of social attitudes and opinions, including their development, description, measurement, modification, and organization. [39L]

Prerequisite: PSY220Y, P.I.

PSY324H Aggression

Examination of the situational determinants of human aggressive behaviour. Some comparative literature will be related to a global view of the problem. Topics include: definition of aggression, aggression as arousal, alcohol and violence, personal space, anger and cognitive labelling, and deindividuation. [26L]

Prerequisite: PSY100Y

PSY329H Social Psychology Laboratory

Independent research projects in social psychology. Each project will include the design of an experiment, data collection, and a written report. [39P]

Prerequisite: PSY201H, 220Y, P.I.

PSY331H Psychological Tests

Critical analysis of objective and projective tests of intelligence, personality, interests and aptitudes will be undertaken with considerable emphasis given to reliability and validity research associated with these instruments. [39L]

Prerequisite: PSY100Y, 201H, any other 200 level course in Psychology

PSY332H Advanced Personality
Detailed discussion of the extension of major theories of personality to treatment (therapy) for personality disorders, and research growing out of the theories. [26L]
Prerequisite: PSY230H

PSY340Y Abnormal Psychology
A survey of theories and research on abnormal behaviour and psychological treatment with special emphasis on social learning theory and behaviour modification techniques. [78L]
Exclusion: PSY240H(G)
Prerequisite: PSY100Y, a 200 level course in Psychology

PSY341H Psychopathologies of Childhood
Considers concepts of normal, abnormal and delayed development. Schemes of classification and diagnosis, approaches to identification of etiologies, and contemporary treatment methods are critically evaluated. The emphasis is on controlled research as a primary source of knowledge about psychopathology and treatment. [39L]
Prerequisite: PSY210Y/340Y

PSY342Y Practicum in Exceptionality in Human Learning
A seminar and practicum dealing with the philosophy and application of psychological principles in working with exceptional children, both handicapped and gifted. Seminar at Erindale, practicum through selective placement in elementary and secondary schools and other public agencies, under the supervision of the course instructor. [26S, 52P]
Prerequisite: 10 full course equivalents, including PSY210Y, P.I.

PSY354H Comparative Social Behaviour
Types of social organization and interaction in various animal groups will be discussed. Emphasis will be placed on the evolution, ontogeny, and biological functions of social behaviour in animal groups which possess complex social systems. [39L]
Prerequisite: PSY100Y, P.I.

JBP359Y Sociobiology: Biological Bases of Social Behaviour
Concepts of ethology, ecology, and population biology will be introduced and applied to the understanding of the evolution and biological function of social behaviour. Topics to be discussed will include altruism, aggression, social spacing, dominance, sex, parental investment and care, social symbioses, and the evolution of life histories. Emphasis will be placed on the complex social systems of insects and mammals. Laboratory ses-

sions will involve field observations, laboratory demonstrations, and the preparation of individual projects. [56L, 78P]
Prerequisite: BIO201Y/203H, PSY100Y, P.I.

PSY373H Human Memory and Learning
Facts, theories, and methods in the study of human learning. Major emphasis will be on recent trends in the study of verbal learning, memory and verbal behaviour. [39L]
Exclusion: PSY371H(G), 372H(G)
Prerequisite: PSY260H/270Y (PSY270Y is strongly recommended)

PSY374H Introductory Psycholinguistics
A contemporary approach to the psychological study of language and speech, highlighting the biological and cognitive aspects of language acquisition and use. [26L]
Exclusion: JLP324H(G)
Prerequisite: PSY210Y/260H/270Y

PSY376H Psychology of Reading
Survey of various topics concerning reading processes and their acquisition, including perceptual processes in reading, reading comprehension and recall, learning to read, individual differences in reading skills, rapid reading, reading disabilities and artificial intelligence models of reading. Emphasis will be on an understanding of the underlying information-processing mechanisms. [39L]
Prerequisite: PSY260H/270Y

PSY379H Human Memory and Learning
Laboratory
Experiments will be carried out to illustrate recent theoretical and experimental issues. Students use themselves (and other students) as subjects* and they design, carry out and report experiments in this area. [39P]
Prerequisite: PSY201H, 270Y/373H, P.I.

PSY389H Sensory and Perceptual Processes
Laboratory
The fundamentals of sensory and perceptual processes. Students conduct laboratory experiments, using each other as subjects. [39P]
Prerequisite: PSY201H, 280Y, P.I.

PSY390H Advanced Topics in Physiological Psychology
(Topics change periodically)
Current areas of research in physiological psychology will be explored in detail. These areas will include the following: the hormonal bases of human and animal behaviour, the development of motivational systems and perceptual capacities, the physiological bases of memory, language, and other higher cortical functions in man, and the neurochemical bases of sleep and emotion. [39L]
Prerequisite: PSY290Y, P.I.

PSY393H Cognitive Neurology

Problems in cognitive psychology will be explored from the viewpoint of clinical neurology. Some sample topics: amnesia and models of memory; split-brain research; the temporal lobes and verbal and non-verbal memory; the role of the frontal lobes; perceptual asymmetries in normal people; models of brain function. [26L]

Prerequisite: PSY252H/270Y/290Y

PSY394H Motivation and Emotion

This course will examine models of emotion from an historical and theoretical perspective. Close attention will be paid to the role of cognitive-perceptual, autonomic and somatic variables particularly as they relate to the phenomenology of emotion and the motivation of behaviour. [26L]

Prerequisite: PSY100Y, a 200 level course in Psychology

PSY399H Psychobiology Laboratory

Supervised demonstration experiments designed to familiarize students with methods of collecting, analysing, and reporting data in ethological and physiological experiments employing animal subjects. Students will also learn how to handle selected species of animals. [39P]

Prerequisite: PSY201H, 290Y, P.I.

PSY400Y (*) Thesis

Each student will conduct independent research and write a thesis under the supervision of a staff member(s). Seminar meetings will be held weekly to discuss: (a) general topics important to the conduct of research; (b) student research proposals; (c) thesis results. Admission decided on the basis of academic merit. [78S]

Prerequisite: PSY201H/BIO360Y, PSY309H/ laboratory course in Psychology, satisfactory progress in the Specialist Programme in Psychology or Interdisciplinary Specialist Programme in Animal Behaviour, P.I.

PSY403H (*) Individual Project

Designed for students desiring to pursue independent research into a specific aspect of human or animal behaviour.

Prerequisite: PSY201H, 309H/a laboratory course, P.I.

PSY404H (*) Individual Project

Designed for students desiring to pursue independent research into a specific aspect of human or animal behaviour.

Prerequisite: PSY201H, 309H/a laboratory course, P.I.

PSY410H Special Topics in Developmental Psychology

(Topics change periodically)

Examination in depth of a limited topic within developmental psychology. Content in any given year will depend on instructor. Course description is available from the Psychology Secretary. [39S]

Prerequisite: PSY210Y, P.I.

PSY420H Special Topics in Social Psychology
(Topics change periodically)

Examination in depth of a limited topic within social psychology. Content in any given year will depend on instructor. Course description is available from the Psychology Secretary. [39S]

Prerequisite: PSY220Y, P.I.

PSY440H Special Topics in Abnormal Psychology
(Topics change periodically)

Examination in depth of a limited topic within abnormal psychology. Content in any given year will depend on instructor. Course description is available from the Psychology Secretary. [39S]

Prerequisite: PSY340Y, P.I.

PSY480H Special Topics in Perception
(Topics change periodically)

Examination in depth of selected topics within perception. Content in any given year will depend on instructor. Course description is available from the Psychology Secretary. [39S]

Prerequisite: PSY280Y, P.I.

Faculty Advisors: Professors L.E. Schmidt, L.J. Elmer

The academic study of religion involves the examination of many forms of religious life, including such major traditions as Buddhism, Christianity, Hinduism, Islam, and Judaism, from a variety of perspectives (for example, historical, philosophical, social scientific, textual). The diversity which characterizes this study is reflected in the variety of courses offered or crosslisted by the Department, and by the wide range of training and expertise of our faculty.

The study of religion offers useful preparation for participation in a religiously diverse world. As an inquiry into an important dimension of human life it is intrinsically valuable and satisfying, but can also help prepare one for a wide range of careers (e.g., social work, law, politics from the local to the international level, teaching, medicine, leadership in religious organizations). The academic study of religion can also lead to graduate work, such as the M.A. and Ph.D. programmes at the University's Centre for Religious Studies. Specialist, major, minor and joint programmes are described in detail in the Department of Religious Studies' Handbook. *Enquiries:* Faculty advisor (828-5275) or Department of Religious Studies, 110 Charles St. West, Toronto (978-2395)

Please see Section 7 for details of Programme Requirement.

REL105Y Contemporary Problems in Religious Ethics

An introduction to the analysis of ethical problems in the context of religious studies. Abortion; euthanasia; poverty; militarism; sex, marriage and the changing roles of men and women; reproductive technologies. [52L; 26T]

REL203Y Religion and Literature

The problems of doubt and faith, despair and hope, flesh and spirit, vice and virtue, sin and grace, suffering and freedom, mortality and immortality, in the works of selected imaginative writers. Critical analysis, in terms of classical theological categories, of selections from such authors as Dostoyevsky, Bernanos, Mauriac, Eliot and Camus. (All works to be read in English). [52L; 26T]

REL207H Religion and Identity in Canada

Personal and social identity as created and expressed through such Canadian religious groups as "mainline" religious traditions, evangelical sects, pentecostal-charismatic movements, ethnic churches, and the "new religions". Religious behaviour studied as the interplay between believing and belonging. [26S]

Recommended preparation: REL105Y

REL212Y Major Themes in Biblical Literature

Major religious themes running through biblical literature. Old and New Testament concepts of creation, election, covenant, salvation, divine law, prophecy, wisdom, justification, etc. [52L; 26T]

REL220Y World Religions: An Introduction

(Formerly REL 100Y)

An introduction to the main teachings, practices and institutions of the major religious traditions from prehistoric to modern times, including Hinduism, Buddhism, Jainism, Confucianism, Taoism, Shinto, Zoroastrianism, Judaism, Christianity and Islam. [52L; 26T]

REL223H Christian Ethics and Human Sexuality

The basis in Christian ethics for: a formulation of standards of inter-personal conduct and sexual relations; an analysis of changing sexual mores, familial structures and childrearing techniques; and a critical evaluation of the development of reproductive technologies (e.g. artificial insemination, surrogate motherhood). [26S]

Recommended preparation: REL105Y

REL224H Technology, Ethics and the Future of Humanity

The role of technology within various projections of global economic development examined from a Christian ethical perspective. Ethical responses to some of the problems which threaten the future of humanity: poverty, resource depletion, environmental degradation and the arms build up. [26S]

Recommended preparation: REL105Y

REL230Y The Roles of Religion in Human Development

The positive and negative roles which religion has played and continues to play in the process of human development. A general analysis of personhood and the need in authentic human living for self-transcendence. The phenomenon of faith; religion as wonder; religion as meaning; and religion as health. [52L]

REL241Y Introduction to the New Testament

An introduction to the types of literature in the New Testament (Gospels, Acts, Epistles, Apocalypse) and to the distinctive content of the literature as a whole. The history of texts and versions, the process of canonization of the literature, and the critical methods of scriptural study are examined. [52L; 26T]

REL247H Religion in Modern Japanese Society
The impact of modern technological developments and Western culture on traditional Japanese society. The role of the "New Religions" as well as the older traditions in 20th century Japan. [26L, 13T]
Exclusion: REL347H

REL251H Religious Ethics: The Protestant Tradition (Formerly REL322H)
The development of Protestant ethics since the Reformation. Sixteenth century reformers, pietism and romantic Protestantism, modern Protestant ethics. Representative figures such as Luther, Calvin, Schleiermacher, Ritschl and Tillich. [26L, 13T]
Recommended preparation: REL105Y

REL261Y Christianity in the Context of World Religions
The ways in which the development of Christian beliefs, practices were institutions were influenced by Christianity's interactions with other religious traditions over the centuries from the earliest days to the present. [52L]

REL263Y Buddhism: Its Essence and Development
The origins of Buddhist teachings, practices and institutions in India, their spread throughout the rest of Asia, and the development of new schools of Buddhism in East Asia. Common and distinctive characteristics of the three major branches (Theravada, Mahayana and Tantra). [52L, 26T]
Recommended preparation: REL100Y/220Y

REL315H Social Issues and the Canadian Churches
(Formerly REL 246Y, REL 307H)
An analysis of Protestant and Roman Catholic responses to current Canadian social and ethical issues such as: immigration and refugee policy, unemployment and poverty, peace and disarmament, northern development, corporate responsibility, women's rights, pornography. [26S]
Recommended preparation: REL105Y/207H/224H

REL361Y World Religions: A Comparative Study
A comparison of the main teachings, practices and institutions of the major religious traditions of the West (especially Christianity) with those of the East (especially Buddhism). Points of similarity and contrast between them, the ways in which the traditions are being influenced by modern movements (humanism, secularism, etc.), and our understanding of them in light of various modern theories of religion (Freud, Marx, etc.). [52S]
Recommended preparation: REL100Y/220Y

REL362Y Evolution: Cosmic and Religious Implications
Biblical, patristic and medieval, philosophical and theological antecedents to the theory of scientific evolution. Nineteenth century developments. The thought of Teilhard de Chardin as a twentieth century Christian interpretation. Concepts of building the earth, converging and personalizing universe, matter and spirit, energetics of love. Evolution as it relates to religious themes of creation, faith, sin and evil, cosmic Christ, hope and the end of time. [52L]
Exclusion: REL233Y
Recommended preparation: one previous REL course

REL363H Evil and Sin: A Christian Interpretation
Evil is examined as a universal reality which presents itself both as a philosophical/theological challenge, and as a mystery in human existence. It calls into question the goodness and power, if not the very existence of God and raises questions about justice and meaning of human and cosmic existence. An examination of the biblical and theological background to a Christian interpretation of cosmic and moral evil. [26L]

REL375Y The Development of Christian Identity
The development of Christian identity, (1) as examined from a psycho-social, ethical and theological perspective; (2) as revealed in personal documents like autobiographies, diaries and letters; (3) as a challenge in a secularized, technological society dominated by the mass media. [52S]
Prerequisite: one REL course
Recommended preparation: REL105Y/230Y

REL382H The Future of Religion
Theistic religion in the modern world: its forms, impact and relevance; nineteenth and twentieth century critiques, and debates concerning the existence and concepts of a personal God: God above, God ahead or no God. Theistic and atheistic responses to secularization; the challenge of evolutionary theory to religion. [26L]
Prerequisite: One REL course
Recommended preparation: REL230Y/362Y

REL490Y Individual Studies
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for Specialists and Majors. After obtaining a supervisor, a student must apply to the Department.

REL491H Individual Studies

Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for Specialists and Majors. After obtaining a supervisor, a student must apply to the Department.

REL492H Individual Studies

Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for Specialists and Majors. After obtaining a supervisor, a student must apply to the Department.

Faculty Advisor:

One of the essential questions sociologists have had to confront concerns the extent to which the individual is determined by society and to what extent he is a determinant of society. In examining such questions, sociologists use the methods of science as well as those of the humanistic disciplines. The answers are not self-evident and traditional explanations often prove unreliable, both as a source of understanding and as a guide to action. Sociology provides another approach for assessing existing knowledge and developing more valid theories of social behaviour and the nature of society.

Students in other fields may gain from the study of sociology a clearer understanding of the human and social condition as it relates to their chosen profession and to contemporary institutions in general. There are opportunities in Canada and abroad for professional sociologists in teaching, research, administrative and consulting positions. A professional career in sociology usually requires advanced training beyond the undergraduate level.

There are a variety of areas of interest which the student may select for emphasis in the specialist and major programmes. The subspecialty areas in sociology are listed below and the Department is prepared to recommend, in consultation with the student, programmes which emphasize Canadian society, urban sociology, interpersonal relations, research methods or some other combination of courses. Students entering the sociology programme should enrol with the Department of Sociology *before the end of the first term in their second and subsequent years* and should seek advice from the advisor or other instructors in the Department while working out their programmes. Registration in the final year of studies is necessary to confirm that all requirements are being met and to insure that the specialist, major, or minor status will be noted on one's graduating transcript. Students should check with the departmental advisor when enrolling in the Department.

The Department of Sociology offers a Specialist, a Major and a Minor Programme in Sociology.

Please see Section 7 for details of Programme Requirement.

SOC101Y Introduction to Sociology

An introduction to the basic concepts, principles, and methods of sociology as a discipline for the study of society. [52L, 26T]

Exclusion: SOC216Y

SOC152Y Introduction to Communication Theory and Research

This course aims at presenting the major theories of verbal and nonverbal communication. The principal purpose is to familiarize the student with the various possibilities of analyzing communication from the point of view of psychology, sociology, philosophy, linguistics, drama, physics and religious studies. The course further aims to acquaint the student with the research methods most commonly used in designing experiments in communication. [52L, 26T]

Prerequisite: SOC101Y/216Y either previously or concurrently

SOC200Y Introduction to Social Research

How social observations are used to develop and test sociological ideas. A variety of theoretical approaches and research techniques are critically examined to illustrate general principles of conceptualization, measurement, and explanation. [52L, 26T]

Prerequisite: SOC101Y/216Y

Offered in alternate years.

SOC201Y Social Statistics

An introduction to data analysis which emphasizes understanding rather than mathematics, exploratory techniques (how to look for hypotheses); corresponding confirmatory techniques (how to test hypotheses). Basic analysis of variance, regression, chi-square; tables and graphs. [52L, 26T]

Exclusion: Statistics courses but not STA242Y

Prerequisite: SOC101Y/216Y

Offered in alternate years.

SOC202Y Structure of Interpersonal Relations

A study of patterned relationships, social roles, and social expectations that arise out of interaction among individuals. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC203Y History of Social Theory

Origins and development of the classical tradition of sociological theory; the social and political ideas of this tradition; historical contexts, ideological elements and contemporary relevance. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC205Y Urban Sociology

Examines the city both as a significant development in world civilization and a working mechanism guided by contemporary policies. Studies human behaviour in its multifaceted relations with the urban environment. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC206Y Social Organization

Classical and recent theories specifying the organizational bases of different types of society.

These are applied comparatively through empirical studies of selected topics. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC207Y Sociology of Work and Occupations

The nature and meaning of work in relation to changes in the position of the professions, unions and government, of women and minority groups, and in industrial societies more generally. Career choice and strategies, occupational mobility, and individual satisfaction at work. [52L, 26T]

Prerequisite: SOC101Y/216Y

Offered in alternate years.

SOC210Y Ethnicity in Social Organization

Impact of racial, ethnic, and linguistic heterogeneity and of various patterns of immigration on economic, political, and cultural institutions, and on individual identity, self-conceptions, social attitudes, and relations. [52L]

Prerequisite: SOC101Y/216Y

SOC212Y Deviance and Control

A sociological analysis of deviant behaviour which examines theories of its genesis, social definition, maintenance, control, and social consequences. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC214Y Sociology of the Family

Development of the contemporary western family with special emphasis on changing relations among its members. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC215Y Socialization

The acquisition and reproduction of personality, culture, and social structure. Topics will include socialization and the socio-biology debate, psycho-social, cognitive, and behaviouristic approaches to human development, child-rearing practices, sex-role acquisition and learning, structural influences on values, attitudes and aspirations, political socialization, adult socialization and aging, and the comparative study of socialization. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC216Y Advanced Introduction to Sociology

Introduction to sociology through an intensive critical examination of selected parts of the discipline; intended for students who cannot enrol in a 100 series course. (Not open to first year students or students from outside Arts & Science) [52L, 13T]

Exclusion: SOC101Y

SOC220Y Canadian Society

An analysis of the changing structure of Canadian society. [52L, 26T]

Prerequisite: SOC101Y/216Y

SOC245Y The Sociology of Aging

Social gerontology is a growing discipline dealing with many social aspects of advanced age, e.g., problems of retirement, post-retirement life, living arrangements and family, changes in identity, new roles for later life. [52L]

Prerequisite: SOC101Y/216Y

SOC280Y Communication and the Extraordinary

The study of persons labeled "exceptional" in mundane settings (family, school, leisure, etc.) and of those labeled "ordinary" in extreme settings (concentration camp, natural disaster, exile, etc.). Emphasis will be placed on the child and adolescent and how he shuttles in and out of the roles of perpetrator, victim, spectator and survivor as information becomes available from his verbal and non-verbal communicational acts. [26L, 26T]

Prerequisite: SOC101Y/216Y, 152Y

SOC284Y Communication and Ethics

This course examines the different ways that the flow and the content of information are controlled by various agencies, as well as the effects of censorship, or lack of it, on society. [52L]

Prerequisite: SOC152Y

SOC301Y Social Inequality

Examines the various systems by which, in all human societies, rewards (such as prestige, power, wealth, and others) are differentially distributed, and the principal theories that have attempted to account for these phenomena. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at the 200 level either previously or concurrently

SOC303H Careers in Crime and Delinquency

An examination of delinquent and criminal lifestyles from the perspectives of social psychology, the sociology of occupations, and the sociology of law. The etiology, social history, organization, and societal response to different types of crime and delinquency are considered. Special attention is given to the career criminal. [26L, 13T]

Prerequisite: SOC101Y/216Y, 212Y

SOC304Y Change and Conflict in Contemporary Society

An examination of technical, social, and ideological changes accompanying industrialization in both developed and underdeveloped nations. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at the 200 level either previously or concurrently

SOC305Y Sociology of Religion

Various theories of religious behaviour and organization are examined with special attention given to the role of religion in relation to social change and social integration. Current research and methods of study will be stressed. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at 200 level either previously or concurrently
Offered in alternate years.

SOC306Y Sociology of Crime and Delinquency

Definitions and sociological explanations of crime and delinquency. Social background of Canadian criminal law; the role of police, courts, prisons and other institutions of social control. [52L]

Prerequisite: SOC212Y

SOC308Y The Canadian Media

An analysis of the institutional foundations and constraints of Canadian printed, filmed and electronic media. Emphasis will be placed upon the historical development of the Canadian media including foreign influences on policy and decision making; the role of such bodies as the CRTC and provincial censorship boards; national versus private broadcasting; bilingual and multilingual media; and the impact of videotext systems, such as Telidon. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 Sociology course at the 200 level either previously or concurrently

SOC309Y Sociology of Mass Communication

The course first critically appraises some modern communications theorists – Innis, McLuhan, Meier – and then dissects some old and new Canadian media institutions. Special emphasis on the origin and destiny of innovation, governmental media organizations and their articulation with media institutions. Participants create a project utilizing one medium. [52L, 26P]

Prerequisite: SOC101Y/216Y, 1 SOC course at the 200 level either previously or concurrently

SOC311Y Sociology of Education

An analysis of the relationship between education and society in comparative perspective; the consequences of the internal structure of educational systems; and current controversies surrounding the function and structure of educational institutions. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at 200 level either previously or concurrently

SOC312Y Population and Society

An analysis of population change and consequences from both global and Canadian perspectives. Trends in mortality, fertility, and migration are examined relative to their significance for growth, and their relation to social structure and social change. [52L, 26T]

Prerequisite: SOC101Y/216Y, 200Y/201Y

SOC313Y Sociological Theory

The development of sociology and contributions of particular sociologists whose concepts not only have historical interest but also illumine the subject matter and method of contemporary society. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at 200 level either previously or concurrently

SOC315Y Interaction in Institutional Settings

Ethnographic description and comparative analysis of standard social occasions taking place within the domains of the corporation, the church, school, government, and the court. The primary course objective is the observation and documentation of the everyday enactment of institutional "rules of the game" for social interaction. [52L]

Prerequisite: SOC101Y/216Y, 1 SOC course at 200 level either previously or concurrently

Offered in alternate years.

SOC316Y Group Structure and Process

The study of small group processes and structures, including leadership, influence, cliques and coalitions, communication patterns, productivity and morale. [52L, 26T]

Prerequisite: SOC101Y/216Y, 202Y

Offered in alternate years.

SOC319Y Gene Culture Coevolution

Some recent developments in social theory are examined with particular emphasis placed on three evolutionary processes – 1) biological evolution; 2) the "evolution" of behaviour in individual life cycles (individual learning); and 3) sociocultural transmission and evolution; and how these three processes are thought to interact with and affect each other to produce human social behaviour. [52L, 26T]

Prerequisite: PSY100Y/SOC101Y/216Y, BIO101Y/PSY100Y

SOC321H Social Research Methods II: Techniques and Applications

Theoretical and applied problems in research design, sampling and measurement with emphasis on survey research. [26L, 13P]

Prerequisite: SOC101Y/216Y, 200Y

Offered in alternate years.

SOC322H Social Statistics II: Techniques and Applications

The understanding and application of multivariate analysis using computers in the survey research environment. [26L, 13P]

Prerequisite: SOC101Y/216Y, 201Y

Offered in alternate years.

SOC324Y Politics and Society

The social basis of politics. Culture and social organization in their relation to power and its application. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at 200 level either previously or concurrently

SOC325Y Sociology of Health and Medicine

Medicine is examined as a sociocultural phenomenon. A comparative approach will be used to analyze sociocultural processes related to disease and illness etiologies; the social organization of health care; utilization patterns; and the development of healer and patient roles. [52L, 26T]

Prerequisite: SOC101Y/216Y, at least 1 SOC course at 200 level either previously or concurrently

SOC327Y Sociology of Death and Dying

An analysis of death and the process of dying as social and cultural phenomena with emphasis on the complex of beliefs, ideas and actions relative to death. [52L]

Prerequisite: SOC101Y/216Y, one of SOC215Y/245Y/312Y/325Y

SOC328H Environmental Sociology

An examination of the multi-faceted relationship between the physical environment, especially the built environment (e.g., buildings) and human behaviour. Principles underlying people's use of space and the potential significance of the environment as a variable in the study of human behaviour will be considered. [26L, 13T]

Prerequisite: SOC 101Y/216Y, 205Y

SOC329H Collective Behaviour

An analysis of non-conventional social action as seen in crowd and mass behaviour (panics, riots, demonstrations, crazes, etc.) involving a study of relationships between forms of collective action and the more conventional order, i.e., the relationship of collective behaviour to social action and control, stability and change. [26L, 13T]

Prerequisite: SOC101Y/216Y, 1 SOC course at the 200 level either previously or concurrently

SOC330H Race and Ethnic Relations

Social processes involved in minority relations in terms of race and ethnicity and their social, economic, and political consequences. [26L, 13T]

Prerequisite: SOC101Y/216Y, 1 SOC course at the 200 level either previously or concurrently

SOC331Y Communication and Feeling

Sociological and communicational analysis of feeling and "affective-assessment" polarities, e.g., love-hate, trust-mistrust, admiration-disdain, etc., in the context of everyday settings with emphasis

on the family, extramarital relationships (hetero and homosexual), friendships and educational institutions. [26L, 26T]

Prerequisite: SOC152Y, 1 SOC course at the 200 level either previously or concurrently

SOC334Y Communication and Children

Description and analysis of children's verbal and nonverbal communication networks, patterns and skills in the playgroup, in the classroom and with siblings, and with teachers, parents and some other adults. [26L, 26T]

Prerequisite: SOC152Y, 1 SOC course at the 200 level either previously or concurrently

JGS340Y Concepts, Methods and Values in Urban Studies

Designed for students concentrating in urban studies irrespective of major disciplinary area. A survey of a variety of types of urban study from the social science perspective. Linkages between the ways in which urban phenomena and processes are conceptualized, the methods employed to study them and the often implicit system of values in which such investigations are framed. Urban researchers, both academic and applied, will be invited to discuss their research in the context of these issues. [52L, 26T]

Prerequisite: SOC101Y/216Y, 205Y/GGR245Y, SOC200Y/201Y/(GGR202H, 207H, 280H)

SOC346Y Society, Organization, and the Individual
An analysis of formal organizations, e.g., hospitals, prisons, schools, business firms, government agencies, etc., focusing upon their structural characteristics, effects of social environments, and the influence upon their members. [52L, 26T]

Prerequisite: SOC101Y/216Y, 1 SOC course at the 200 level either previously or concurrently

SOC 390Y/391H/392H Independent Research

Intended for Sociology Specialists and Majors who have completed ten university courses, i.e., are in third year, and who wish to explore in depth a particular subject area in sociology. Students must have completed or be taking concurrently the required method and theory courses (SOC 200Y/201Y, 313Y, or their equivalent), and have attained a B average in SOC courses. Students may take a maximum of two full course credits, or equivalent, of independent studies. Not more than one full course or equivalent may be taken with the same instructor. To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor.

NOTE: *FOURTH-YEAR COURSES* provide the opportunity for greater specialization in the five sociology subspecialty areas than is generally possible in the second or third years of the sociology program. The actual content for "selected topics"

courses will vary in focus from year to year. Students are advised to check with the Faculty Advisor/Sociology Office for more specific information re availability, course outlines and for instructions on *balloting*, which is required.

SOC410H Selected Topics in Theory and Research Methods: I

[26S, 13P]

Prerequisite: SOC200Y/201Y for research methods topics, SOC313Y/203Y for sociological theory topics, at least one additional course beyond the introductory level in this subspecialty area

SOC411H Selected Topics in Theory and Research Methods: II

[26S, 13P]

Prerequisite: Same as for SOC410H

SOC420H Selected Topics in Interaction: I

[26S, 13P]

Prerequisite: SOC200Y/201Y, SOC313Y/203Y, at least two additional courses beyond the introductory level in this subspecialty area

SOC421H Selected Topics in Interaction: II

[26S, 13P]

Prerequisite: Same as for SOC420H

SOC422H Selected Topics in Population, Societies, Urban Life or Inequality: I

[26S, 13P]

Prerequisite: SOC200Y/201Y, SOC313Y/203Y, at least two additional courses beyond the introductory level in the designated subspecialty area

SOC423H Selected Topics in Population, Societies, Urban Life or Inequality: II

[26S, 13P]

Prerequisite: Same as for SOC422H

SOC490Y/491H/492H Independent Research

Open only to students who have completed fifteen university courses, i.e., are in fourth year, and have a B average in SOC courses. For other requirements and restrictions, see SOC390Y/391H/392H.

Faculty Advisor: Professor O. Hegyi
Hispanic culture offers a variety probably unrivaled by any other modern western culture. In the Middle Ages Spain was the vital point of contact between the Christian, Jewish and Islamic civilizations; in its Golden Age it led the way in the exploration and settlement of the New World, and established a great empire in the process; today it is estimated that the Spanish language is the third most widely-spoken in the world.

Spanish studies has a twofold goal; the first, to learn to speak, understand, read and write with ease a language shared by over two hundred million people; the second, to become familiar with the civilization and intellectual life of the Hispanic world through the study of the artistic and literary phenomena of that world.

Courses are offered for beginners in the language, as well as those with grade 13 standing or equivalent. Stress is laid on both spoken and written language and the language laboratory is used to promote fluency. After the first year all courses, both literary and linguistic, are conducted in Spanish as much as possible to give the student maximum exposure to the language.

Two courses, Spanish Civilization and Culture, and Latin American Civilization and Culture, are offered in English and may be taken by students in any year. These courses provide comprehensive views of the social, political, artistic and intellectual developments of Spain and Latin America and have proven useful not only to students studying the language but also to those who may have an interest in the Hispanic scene for other reasons.

Core language courses are offered in all years. Students wishing to specialize would, in addition to these core courses, follow programmes in literature and linguistics designed to allow them to enter Graduate Studies in Spanish or Type A courses at the Faculty of Education. Students may elect a specialization (10 courses), a major programme consisting of 6 courses, or a minor programme of 3 courses.

Opportunities for qualified teachers exist at the secondary and university levels. In addition, the study of Spanish as of other modern languages, may prepare students for careers in the foreign service, journalism, publishing, commercial and cultural relations between Canada and Spanish-speaking countries. The development of closer Canadian relations with Spain and Latin America will extend the range of opportunity for those well versed in the Hispanic field.

In addition to Erindale course offerings, other courses may be taken on the St. George campus with the permission of the Faculty Advisor. Students may also wish to participate in the Study Elsewhere programme.

Early consultation with the staff is essential if the student is to be assured of a programme suitable for his needs and interests.

Courses with low enrolment may have to be withdrawn. While every effort will be made to accommodate students locally according to their needs, those in the Specialist and Combined Specialist programmes should be prepared to take one or two of their courses on the St. George Campus.

Please see Section 7 for details of Programme Requirement.

SPA100Y Spanish Language for Beginners

For those who have had no previous background in Spanish. By the end of the year, students should have sufficient skill in the written and spoken language to be able to specialize in Spanish if they wish. Emphasis will be placed on oral practice both in class and in the language laboratory. [78L, 26P]

Exclusion: Grade 13 Spanish

SPA220Y Composition and Oral Practice II

Conducted mainly in Spanish and designed for those who have completed a basic course in the language. A grammar review and intensive written and oral practice provide an opportunity for a greater range of expression and a broader understanding of the language. [52L, 26T]

Prerequisite: Grade 13 Spanish/SPA100Y
Not open to Native Speakers.

SPA250Y Spanish Civilization and Culture (In English)

Historical approach to selected topics in Spanish culture and civilization, including literature and art, with special attention given to Spain's interplay with other Mediterranean areas, especially that of Islam. Illustrative material. [52L, 26T]

Offered in alternate years.

SPA258Y Forms of Modern Hispanic Literature

An introduction to ways of analysing literature through a study of Modern Hispanic literary texts (drama, prose and poetry). [52L, 26T]

Exclusion: SPA247H, 257H

Prerequisite: Grade 13 Spanish/SPA100Y

Offered in alternate years.

SPA280Y Latin American Civilization and Culture

From the pre-Columbian civilization (Aztec, Maya and Inca) to the present; deals with significant manifestations in literature, art, music, architecture. Discussion of social, economic and political problems of Latin America. Illustrative material. [52L]

Offered in alternate years.

SPA320Y Composition and Oral Practice III
Conducted mainly in Spanish and designed to meet the needs of those who already have a good basic knowledge of the language. Emphasis on improvement of style, translation, essay writing and oral practice. [52L, 26T]
Prerequisite: SPA220Y

SPA343H Approaches to Golden Age Drama
A survey of Spain's most fertile, original and historically significant period of dramatic production. Special attention will be given to critical methods, structural analysis and dramatic theory. The plays studied will also be related to the socio-cultural context of the age. [26L, 13T]
Exclusion: SPA350Y
Prerequisite: SPA220Y, one other course in the 200 or 300 series
Offered in alternate years.

SPA348Y Modern Hispanic Drama
The major Spanish and Spanish American playwrights of the 20th century. Plays will be discussed and analyzed and, to reveal their full meaning in tangible theatrical terms, students will be encouraged to participate in the actual performance of some plays in a real theatre atmosphere. [52L]
Exclusion: SPA346H, 376H
Prerequisite: SPA220Y
Offered in alternate years.

SPA353H Golden Age Prose
A study, in Spanish, of the varieties of fiction during the sixteenth and seventeenth centuries with special reference to Cervantes. The texts will be related to the historical setting that gave rise to them and the relationship between reality and fiction will be discussed. [26L, 13T]
Exclusion: SPA350Y
Prerequisite: SPA220Y/one other course in the 200 or 300 series
Offered in alternate years.

SPA356H Modern Spanish Novel
Covers the period from the beginning of the realistic novel in the nineteenth century up to the present day. Students will be expected to do a certain amount of reading of original texts as a preparation for their classes and a good working knowledge of Spanish is assumed as the course will be given in Spanish. [26L]
Prerequisite: One or more SPA 200 series courses
Offered in alternate years.

SPA366H Modern Spanish American Poetry
A study of some major poets and the different currents in Spanish American poetry; Pablo Neruda, Cesar Vallejo for special study. [26L]
Prerequisite: One or more SPA 200 series courses
Offered in alternate years.

SPA382H Modern Spanish American Novel
A study of the representative novels of Spanish America, including the regional and Indianist novel as well as that of the Mexican revolution. [26L]
Prerequisite: One or more SPA 200 series courses
Offered in alternate years.

SPA385H Spanish American Stories
Representative works of outstanding Spanish American short story writers including Quiroga, Cortazar, Rulfo and Borges. [26L]
Prerequisite: One or more SPA200 series courses
Offered in alternate years.

SPA420Y Advanced Composition and Oral Practice IV
Designed for those who already have a good knowledge of the language. Emphasis on ability to write and speak good Spanish through translation, essays, letters, class discussions, etc. [52T]
Prerequisite: SPA320Y

SPA425H History of the Spanish Language
Begins with an introduction to phonetics, phonology and basic concepts of linguistics. Proceeds to the study of the evolution of Spanish from its Vulgar Latin origins up to the present day. An attempt will be made to relate linguistic development to historical and cultural aspects. Some general knowledge of Latin is desirable. Interest in theoretical linguistics and a working knowledge of Spanish will be assumed. Given in Spanish. [26L]
Prerequisite: SPA220Y
Offered in alternate years.

SPA436H Contemporary Spanish Poetry
A study of some major poets and poetics of the twentieth century. The lectures will be in Spanish. [26L]
Prerequisite: SPA220Y
Corequisite: SPA320Y
Offered in alternate years.

Faculty Advisor: Mrs. O. Fraser:

Statistical theory and methodology have applications in almost all areas of science, engineering, business, government and industry. The practising statistician is involved in such diverse projects as designing clinical trials to test a new drug, economic model-building to evaluate the costs of a guaranteed-income scheme, predicting the outcome of a national election, planning a survey of television viewing habits, and estimating the animal population in a popular hunting district. Today's consumer is bombarded with the results of so many quantitative studies using statistical methodology that it is necessary for him to know something about statistics in order to be properly critical. A basic knowledge of statistics should be an integral part of everyone's general education.

STUDENTS WHO ARE INTERESTED IN A PROGRAMME ARE STRONGLY URGED TO HAVE EARLY CONSULTATION WITH THE FACULTY ADVISOR OR ANY STAFF MEMBER.

NOTE: Some courses required for Major and Specialist Programmes may be available only on the St. George Campus.

Please see Section 7 for details of Programme Requirement.

STA202H (I) Statistics

Acquaints beginning students in the biological, physical and social sciences with the fundamentals of statistics. The course discusses statistical procedures for describing large quantities of data and for making inferences about populations on the basis of samples. [26L, 13T]

Exclusion: Any concurrent or previous Statistics course

STA212H (I) Application of Statistics

A continuation of STA202H including an introduction to non-parametric, analysis of variance and linear regression techniques. Students interested in taking this course should consider carefully the courses listed below as exclusions and choose the appropriate sequence after discussion with faculty members. STA202H and 212H are together equivalent to STA222Y(G). [26L, 13T]

Exclusion: STA222Y(G), 242Y, 262Y, 352Y(G), PSY202H, ECO220Y, 227Y, SOC201Y, GGR212H, BIO361H

Prerequisite: STA202H

STA242Y Probability and Statistics: An

Introduction

Elements of probability theory, common distributions, point and interval estimation, standard significance tests, introduction to least squares and analysis of variance. [52L, 26T]

Exclusion: STA212H, 222Y(G), 262Y, 352Y(G), PSY202H, ECO220Y, 227Y, SOC201Y, GGR212H, BIO361H

Prerequisite: MAT132Y/138Y

STA262Y Probability and Statistics: An Introduction

This course deals more rigorously with the topics included in STA242Y and is intended primarily for students in certain Specialist Programmes.

[52L 26T]

Exclusion: STA212H, 222Y(G), 242Y, 352Y(G), PSY202H, ECO220Y, 227Y, SOC201Y, GGR212H, BIO361H

Corequisite: MAT228H, 233H/234Y/238Y

STA302H Regression Analysis

Least squares theory and fitting equations to data, analysis of residuals, transformations. Practical implementations stressed. [26L, 13T]

Prerequisite: STA242Y/262Y/(STA212H and permission of instructor)

Recommended Prerequisite: MAT228H

STA312H Topics in Statistics

Probability; distributions, expectation, and inference. [26L, 13T]

Exclusion: STA352Y(G)

Prerequisite: STA262Y/(STA242Y and permission of instructor)

STA347H Probability and Applications

Probability spaces and random variables, conditional probability, characteristic functions, limit laws. Application of common probability distributions. Introduction to stochastic processes. [26L, 13T]

Prerequisite: STA262Y/(STA242Y and permission of instructor)

STA402H Experimental Design

Statistical issues in the design of experiments and the collection of data. Analysis of variance, randomization, factorial designs, blocking, confounding, higher-way tables. [26L, 13T]

Prerequisite: STA302H

STA412H Estimation and Testing

Basic theory of estimation and hypothesis testing. [26L, 13T]

Prerequisite: STA312H

STA432H Advanced Statistics

Topics selected from: non-parametric techniques, multivariate analysis, decision-theoretic methods, Bayesian analysis, exploratory data-analysis, sequential procedures, reliability and life-testing. [26L, 13T]

Prerequisite: STA262Y/(STA242Y and permission of instructor)

Faculty Advisor: Professor G. Gracie

Survey Science is concerned with the measurement and representation of the geometric and physical features of our environment. It finds application in a variety of activities, which include mapping the earth's surface and charting its waters, locating land boundaries and delineating property, searching for and inventorying natural resources, determining the size and shape of the earth, and locating transportation facilities and other engineered structures.

Survey Science has close contact with many other disciplines, particularly those which deal with the land, its use, subdivision, development and management. Although very much a quantitative science, built upon a strong base of mathematics, physics and statistics, it also includes a substantial treatment of the law as it relates to the land and professional conduct.

Students who intend to proceed to registration with the Association of Ontario Land Surveyors will satisfy the academic requirements of the Board of Examiners by completing the four-year Specialist Programme set forth in Section 7 of this Calendar, together with those other courses specified by the Board and which are given as elective courses within this Programme. For these requirements of the Board as set down from time to time, students should contact the Faculty Advisor.

For registration as a Canada Lands Surveyor or with other provincial associations, students should enquire directly to the secretary of the Board of Examiners of that jurisdiction.

All SUR courses, except SUR251H, 352H, 353H, 454H, 455H, 456H and 458H, count as science credits.

Please see Section 7 for details of Programme Requirement.

SUR201H (I) Surveying I: Introduction

Introduction to the procedures used to acquire field data with applications in various surveying activities. [26L, 39P]

Prerequisite: Grade 13 Mathematics (Algebra and R&F) or Ontario Academic Credit: Algebra and Geometry.

SUR202H (I) Surveying II

Processing of survey data for presentation in various forms. Traverse calculations, coordinate geometry and circular curve geometry. [26L, 39P]

Prerequisite: SUR201H

Corequisite: MAT138Y/132Y

SUR203H Surveying III

Celestial and terrestrial coordinate systems and their interrelationship. The determination of astronomic azimuth. Definition of elevation; levelling instrumentation and analysis of errors; precise levelling procedures. [26L, 39P]

Exclusion: SUR230Y

Prerequisite: MAT138Y/132Y, PHY140Y/132Y, SUR202H

SUR204H Surveying IV

Electromagnetic distance measurement. Theodolite: design and calibration. Construction surveys dealing with alignment and the volume of materials. [26L, 39P]

Exclusion: SUR230Y

Prerequisite: SUR203H

SUR210H Introduction to Survey Analysis

Application of matrix methods and the computer to the analysis of survey problems. Linear equations and their methods of solution. Linearization of computational models. Coordinate transformations. Error analysis and error propagation. [26L, 26T]

Prerequisite: MAT132Y/138Y, CSC104H/108H/148H

Corequisite: SUR201H

SUR241H Introduction to Land Planning

Fundamentals of obtaining and processing site information to provide the framework for land planning and site development design. Concept of official plans and zoning bylaws. [26L, 13T]

Prerequisite: GSC120H, 121H/GGR100Y

SUR251H Introduction to Law and the Legal System

Legal history; legal systems and institutions; introduction to English law in general, with emphasis on land law; legal proceedings; the law of professional practice. [39L]

Prerequisite: INE203H/205H/ENG100Y

We specifically prefer students to take INE203H or 205H as most pertinent and valuable instruction for this Programme.

SUR261H Spatial Data Management and Representation

An overview for all survey and other resource sciences students which introduces both fundamental concepts of computing systems and practical knowledge relating to different hardware and software environments. Thematic mapping and cartographic analysis as part of data manipulation and graphic display. [26L, 26P]

Exclusion: SUR362H

Prerequisite: Second year standing and P.I.

SUR311H Survey Analysis I

The statistical theory of measurement; precision and accuracy; variance-covariance propagation; error ellipses and their statistical properties. Pre-analysis of measurements. The adjustment of observations; parametric, conditional and combined least squares procedures, with applications to surveying problems. [26L, 26P]

Prerequisite: SUR202H, 210H, STA202H/242Y

SUR312H Survey Analysis II

Survey control systems. Statistical analysis of survey data including estimation of variance components; regression analysis; models; filters; adjustment of large survey networks; estimation of reliability and accuracy of survey systems. [26L, 39P]

Prerequisite: SUR311H

SUR320H Introduction to Geodetic Methods

Concepts of geodesy and the evolution of geodetic methodology; basic principles of modern geodetic techniques; control surveys in the context of recent advances in satellite methods of positioning; overview of geodetic methods for projects of high accuracy standards on limited sites and for monitoring time-related changes. [26L, 26T]

Prerequisite: SUR203H, 210H

SUR321H Geodesy I

Figure of the earth, gravitational potential, gravity field, principles of satellite and inertial positioning systems, levelling and geopotential numbers, tidal effects. [26L, 26P]

Prerequisite: SUR204H, 210H

SUR322H Geodesy II

Reduction of geodetic observations, horizontal, vertical and three-dimensional networks, map projections, gravimetry, accuracy assessment. [26L, 26P]

Prerequisite: SUR321H

SUR325H Geodetic Astronomy

The celestial sphere and its coordinate systems, variations in celestial coordinates, time systems, star catalogues and instrumentation. Determination of astronomic azimuth, latitude and longitude. [26L, 39P]

Prerequisite: SUR204H, 210H

SUR335H Photogrammetry I

Vertical photograph geometry and stereopairs. Stereoscopy and parallax. Introduction to stereo-model orientation and stereoplottling instrumentation. Photogrammetric optics. The metric camera. Photographic processes. [26L, 39P]

Prerequisite: Second year standing and P.I.

SUR336H Photogrammetry II

Stereomodel orientation and stereoplottling instrumentation. Camera calibration. Measurement and reduction of image coordinates. Interior and exterior orientation of the metric photograph; the projective model and collinearity equations. Analytical procedures. Applications of photogrammetry to map compilation. [26L, 39P]

Prerequisite: SUR311H, 335H

SUR337H Remote Sensing and Its Interpretation

Overview of remote sensing. System types discussed for various applications. Introduction to digital image analysis. Assignments on image interpretation. Environmental monitoring and land use. (Intended as an interdisciplinary course.) [26L, 26T]

Prerequisite: Third year standing

SUR346H Drainage Law and Engineering

Legal and engineering aspects of land drainage. Particular emphasis on the Drainage Act of Ontario. [39L]

Prerequisite: SUR203H, 241H

Recommended preparation: SUR251H

SUR352H Land Law, Registration and Cadastre

Real property law; land survey systems; title and deed registration systems. [39L]

Prerequisite: SUR251H

SUR353H Boundary Law

Boundaries; land parcel descriptions; principles of evidence. [39L]

Prerequisite: SUR352H

SUR361H Mapping and Charting

Map and chart content. Projections, classification of maps according to projection surfaces and projection centres. Map distortion. Reproduction of cartographic material. Cartographic techniques and automated systems. Chart compilation. National mapping and charting systems. [26L, 26P]

Prerequisite: SUR203H

SUR391H Special Topics in Survey Science

Studies of selected topics in Survey Science not covered in the regular courses.

Prerequisite: Permission of instructor

SUR392H Special Topics in Survey Science

Studies of selected topics in Survey Science not covered in the regular courses.

Prerequisite: Permission of instructor

SUR405H Field Survey Projects

An intensive session of 144 hours in the field covering various aspects of survey project design, data acquisition, data reduction and layout.

Prerequisite: SUR204H, fourth year standing

SUR423H Applications of Geodetic Methodology
Applications in surveying, geophysics and engineering. Criteria for selection of method, design and implementation of sample projects, assessment of results. [26L, 26P]
Prerequisite: SUR322H

SUR443H Land Planning: Site Development
Development of land within the concept of the Official Plan. Subdivisions, condominiums and general site development and approval procedures. [26L, 13P]
Prerequisite: SUR241H

SUR454H Survey Records and Administration
Advanced studies in Canadian survey laws; legal provisions for surveys and records; land information systems and cadastre; projects, special research and discussion topics. [39L]
Prerequisite: SUR353H

SUR455H Survey Law Seminar
Research in some aspect of law related to surveying; a topic of individual selection for study under supervision, oral presentation before the class and submission of a professional paper. [39S]
Prerequisite: SUR353H and specific P.I.

SUR456H Law of the Sea and Offshore Boundaries
International law related to maritime jurisdictions; development of the Law of the Sea and the United Nations Conventions; Canadian Territorial Sea and Fishing Zones Act; Canada Lands Surveys Act. Technical aspects of the delimitation of maritime boundaries. [26L, 13T]
Prerequisite: SUR251H and specific P.I.

SUR458H Professional Affairs
Perspective on the professions: professional character by statute; professional ethics, responsibility and liability. Fundamentals of business management; contract law; negligence law. Court procedure and expert witness. [39L]
Prerequisite: SUR251H and fourth year standing

SUR463H Spatial Information Systems
Data structures for spatial information systems. Hardware and software for geographical and land information systems. Expert systems. An introduction to graph theory and topology. The use of artificial intelligence language. [26L, 26T]
Prerequisite: SUR362H or any data management or information science course approved by instructor.

SUR471H Hydrographic Surveying I
Underwater acoustics: echo sounding and sonar systems. Bathymetric surveys. Positioning and data collection: automated systems. Tidal theory and analysis. Physical oceanography. Navigation and track control. [26L, 39P]
Prerequisite: SUR312H, 321H

SUR472H Hydrographic Surveying II
Marine surveys including sounding techniques, positioning, depth measurement and sweeping. Geological surveys and measurement of oceanographic parameters. Data processing and nautical cartography. [26L, 39P]
Prerequisite: SUR471H

SUR495H Survey Project and Seminar
Participation in a comprehensive survey project under supervision of staff, including oral presentation of project material before the class and preparation of a final written report. [39P, 13S]
Prerequisite: SUR405H

Faculty Advisor: Professor R.L. Beck

WDW260Y Organizational Behaviour

An introduction to the nature of organizations and the behaviour of people within organizations.

Three major topic areas are covered: a) Individuals and Groups in Organizations: motivation, job satisfaction, leadership, group and intergroup behaviour; b) Organization Structure and Design: bureaucracy, classical theories of management, contingency theories of design; c) Improving Employee Performance and Organizational Effectiveness: communication, decision-making, performance appraisal, reward systems, work design, organizational change. Not recommended for students in the Bachelor of Commerce programme.

Exclusion: COM362H, 363H

Certificate in Business

This certificate is designed to introduce students to the general theories and concepts of business organization and management and to develop analytic skills in a business environment.

It provides an ideal way for students who have not previously attempted post-secondary education to begin their university studies. Many of the courses in the programme are drawn from degree programmes in commerce, economics, political science, computer science and statistics.

Students who wish to undertake degree studies upon completion of the certificate may request advanced standing in these courses.

The certificate is also useful for students who have completed a degree in a field other than Commerce or Business. The programme gives these students an opportunity to learn the basics of accounting, marketing, finance, computer science, personnel, organizational behaviour and public administration at the undergraduate level.

The programme can be a base of preparation for students interested in proceeding towards various professional designations. Further information on related professional associations is contained in the Certificate Programmes Calendar.

Certificate in Personnel and Industrial Relations

This certificate is designed for labour, management and government representatives who have an interest in Personnel and Industrial Relations. The programme was developed in response to a professional demand for individuals with post-secondary education in relevant and specific areas. It is structured to permit concentration in either Personnel or Industrial relations.

Several courses in this certificate may be applied towards the designation C.P.M. (Certificate in Personnel Management) awarded by the Personnel Association of Ontario.

The Certificate Programmes Calendar is available in the Registrar's Office, Room 2122 (828-5344)

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Admission Information

A Great Tradition: The University of Toronto Undergraduate Admission Bulletin

Applied Science and Engineering
Faculty of Applied Science and Engineering
Fifty Questions

Architecture and Landscape Architecture

Faculty of Architecture and Landscape Architecture

Arts and Science

Faculty of Arts and Science
St. George Campus
Erindale College
Scarborough College

Dentistry

Faculty of Dentistry (Undergraduate, Postgraduate, Graduate)

Education

Faculty of Education (including Institute of Child Study)

Forestry

Faculty of Forestry

Law

Faculty of Law

Medicine

Faculty of Medicine, Medical Course
Department of Rehabilitation Medicine

Music

Faculty of Music

Nursing

Faculty of Nursing

Pharmacy

Faculty of Pharmacy

Physical and Health Education

School of Physical and Health Education

The following calendars should be requested directly from the issuing authority. Write to the Faculty, School or Institute at University of Toronto, Toronto, Ontario, M5S 1A1, unless otherwise noted.

Education

Graduate Degrees in Education - write to:
Ontario Institute for Studies in Education
252 Bloor Street West
Toronto, Ontario, M5S 1V6

Graduate Studies

School of Graduate Studies

Library Science

Faculty of Library and Information Science

Management Studies

Faculty of Management

Medicine

Health Administration, Community Health,
Postgraduate Medical Education of
Faculty of Medicine

Music

Royal Conservatory of Music
273 Bloor Street West
Toronto, Ontario, M5S 1W2

Social Work

Faculty of Social Work

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